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CLINICAL REPORT OF FOUR MONTHS' SERVICE IN SURGICAL WARDS OF THE PENNSYLVANIA HOSPITAL.

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THE following very brief review of the more important surgical work which came under my care at the Pennsylvania Hospital, during my term of service, which has just expired (from October 1, 1890, to January 31, 1891, inclusive), may, I trust, be not without interest to the class, who have seen the cases and witnessed the operation.

At the very outset I will state that in all the surgical work, aseptic precautions, as heretofore, were rigidly observed. In quite a number of cases this was rendered difficult from the fact that patients not unfrequently were brought from a distance with their wounds already dressed, perhaps hours before arriving at the hospital. In some instances wounds which apparently had been carefully dressed were found, upon careful examination, to be impregnated with coal-dust or other extraneous matter.

In all such cases the rule was observed to have the wounds re-opened, examined, and dressed *de novo*.

One interesting example of this kind was admitted in November, having been sent from the coal regions. The patient was a miner, whose thigh was crushed by falling coal. He had been dressed by a neighboring surgeon at

the time of accident and only brought to the hospital thirty-six hours afterward. The external wound, which was extensive, had been carefully and tightly sutured. The wound was re-opened, when it was found that there had been complete division of all the muscles on the posterior part of the middle of the thigh, exposing the sciatic nerve and the femur; numerous particles of coal and other foreign matter were found in the muscular tissues and elsewhere. The wound was then thoroughly cleansed, the divided muscles carefully approximated and closely sutured; and in the course of a few days the wound healed promptly and the patient recovered, with good flexion and extension. It is worthy of comment that during this term of service there was not a single case of erysipelas, septicæmia, or tetanus, and no secondary hæmorrhage or other complication after any major operation, and during this same period of four months but two deaths followed operation. One of these was after an abdominal section, which will be again referred to; the other fatal result followed an amputation of the thigh, performed for a railroad crush. On account of extreme shock from the injury and loss of blood (the femoral had been torn), it was impossible to operate until twenty-four hours after the accident. Death followed from recurring shock.

Amputations and wounds incident to operation or injury invariably healed by primary intention without the formation of pus; indeed, suppuration only occurred in such cases as perineal section, supra-pubic cystotomy, etc., where the wound could only close by granulation. In one case of perineal section several hæmorrhages occurred, but it was subsequently

ascertained that the patient always had been of a markedly hæmorrhagic diathesis. He afterward made a good recovery.

The strength of the mercuric solutions for irrigation was uniformly 1 to 1000, and for the wet dressings 1 to 2000; in case of young children this was reduced to 1 to 2000 and 1 to 4000.

Whenever possible, the region of operation was cleansed on the previous day, or even earlier, and the parts were then kept carefully protected by towels wrung out of the mercuric solutions. In no case was there any toxic effect from the absorption of the bichloride solution, or any irritation from its application upon the body of the patient or hands of the attendants.

As a dusting-powder, "aristol" was used almost exclusively; it is probably a germicide and does not produce any irritation, while the absence of all odor is in its favor. It seems to be more efficient and in every way superior to iodoform, which I have abandoned in favor of aristol.

In all cases catgut was used for ligature of arteries, for approximating bone surfaces after resection, etc., and for closing and draining wounds, and, latterly, even for the drainage after amputation. The rubber drain was used in the chest-cavity and glass tubes for the abdominal sections. Silk was used for suturing intestine and closing wounds after sections.

In the treatment of "shock," strychnia was used hypodermatically in doses of $\frac{1}{60}$ to $\frac{1}{30}$ grain, repeated every half-hour or so, and gave excellent results.

In the treatment of fractures I have nothing new to report. The dressings were always of the most simple kind: the fracture-box (which was often suspended) for legs, extension with lateral support by sand-bags for the femur, and, when union occurred, molded paste-board, silicate, or plaster dressings; in fractures of the humerus, molded paste board externally. The chest-wall in many cases was utilized for the internal splint. In many of them the right-angle splint was all that was required.

In fracture of the lower end of the radius no special form of splint was found necessary; the complete and immediate reduction of all displacements of fragments makes the treatment very simple.

In explanation of the comparatively small number of fractures during a winter term of service, and especially of the small proportion

of fractures of the upper extremities, it should be stated that a very large number of fractures coming to the hospital were dressed in the reception-ward and then sent to the out department. Only the most serious of such injuries were received into the wards. One hundred and four cases of fracture were taken into the hospital. Of these 69 were simple fractures, 16 of the femur, 23 of the tibia and fibula; the remaining number included the patella, scapula (1 was from muscular violence), ribs, pelvis, vertebra (spinous processes only), and upper extremities; 35 fractures were compound fractures, 6 of these involving the femur, 5 the tibia and fibula, 12 the skull, and 12 the upper extremities.

Of miscellaneous operations there were 1 supra-pubic cystotomy (stone weighed 960 grains); 1 perinephritic abscess (opened and drained); 3 preliminary ligations of the femoral artery; 3 removals of testicles (tuberculous and syphilitic); 4 perineal sections for impermeable stricture.

There were several amputations of breast; removal of bony, fatty, and other tumors; strangulated hernia; repairing of cervix and perineal lacerations; fistula in ano; fissures and hæmorrhoids (the latter all treated with the ligature); resection of the shaft of the femur, the tibia and fibula, and humerus; opening of deep and superficial abscesses in the interior of bone and in soft parts; minor plastic operations, and resection of nerve-trunks. Taken collectively, these operations form a wide range of work. In the operative treatment of all the cases it is gratifying to report that there were but two deaths, which occurred within twenty-four hours after admission, and both of these presented almost fatal conditions when admitted.

Of 10 dislocations 2 were of the hip (on the dorsum), the others of the humerus, clavicle, and elbow (the latter in a child without fracture).

There were 10 gunshot wounds involving the thigh: in 1 case the ball passed through the penis, 4 were of the arm and leg, and 4 of the chest-cavity; 1 of the latter cases died soon after admission from internal hæmorrhage. Nine concussions of the brain recovered.

Operations.—Five compound depressed fractures required trephining; the wounds closed by immediate union, and without any subsequent symptoms. In trephining, when possible, especially when the scalp-wound is of consider-

able extent, I prefer not to use an anæsthetic. Of 13 amputations, 3 were amputations of the thigh, 3 were amputations of the leg, and 7 were amputations of the arm, forearm, and foot. All recovered except 1 thigh amputation, already referred to.

Of 7 laparotomies there were 1 section for removal of ovaries and tubes, 1 section for purulent peritonitis.

Case I. Acute purulent peritonitis; abdominal section; death. Emil L., about 50 years of age, living some 70 miles from Philadelphia, had occasional slight attacks of abdominal pain during the preceding four or five years, but had never had any serious illness. Present attack came on about eight hours before admission. He had been hard at work during the morning, cutting and hauling ice; at noon, rode home on a load of ice; ate heartily of pork and cabbage. Pain came on suddenly after he took train for his son's home in this city, and while in the cars. Arriving in great distress, he was brought to the hospital, and was admitted into the medical ward about 8 o'clock the same evening. He was in nowise improved by treatment. On the following day, toward noon, his temperature had fallen to 97.4° ; pulse and respiration increased, and a fatal termination seemed inevitable. Sixteen hours after admission an exploratory abdominal incision was made, which revealed the presence of purulent peritonitis; the bowels were covered with recent flaky lymph. The appendix was normal, and no local cause for the disease could be discovered. The patient died five hours later. A post-mortem could not be obtained.

Two Cases of Abdominal Section for the Removal of the Appendix Vermiformis.—Case II. Pericæcal abscess; laparotomy; extensive adhesions; appendix not discovered; recovery, with fæcal fistula. Four months later abdomen re-opened, cæcal fistula found and closed. Recovery. George I., aged 30, was admitted May 12, 1890, in an exceedingly prostrated condition, with a history of pericæcal inflammation, which was followed by symptoms indicating perforation of the appendix and abscess. The attack came on suddenly, with pain in the appendix region, which was greatly increased by pressure; there was nausea, fever, and constipation. Later on, there was a sudden accession of intense pain, with deep swelling and general abdominal tenderness and tympany, a fluctuating temperature, chills, and profuse

sweatings. The skin over the ileo cæcal regions became discolored somewhat, but no distinct tumor could at any time be felt, yet there was a hardness of the deep tissues. Such was the condition on admission, in May, 1890. A lateral incision was then made directly over the region of the appendix, which exposed a large abscess-cavity containing fetid pus. Careful search failed to discover the appendix, but the surroundings were so matted together by adhesions that further exploration was not deemed prudent. It was supposed that the appendix had been destroyed by the violence of the inflammation, which had doubtlessly resulted in gangrene of the organ.

The abscess and abdominal cavity were thoroughly washed and two drain-tubes were inserted,—one of glass to the bottom of the pelvic cavity, the other, the rubber tube, into the most dependent part of the abscess-cavity. A rapid recovery followed, but a fistulous opening remained, which now and then discharged excrementitious matter, showing that an opening existed into the intestine, which was probably at the site of the appendix. In October a second section was made for the purpose of closing the fistula. The incision was made directly in line with that of the first operation; on reaching the cæcum, it was found that all the adhesions which were present at the first operation had been absolutely and completely removed. The cæcum now was readily manipulated, and it was found open, as supposed, at the site of the appendix, which had unquestionably sloughed off. The fistula was of sufficient size to admit the end of the little finger. This was closed with nine Lembert sutures. Recovery was rapid and perfect.

Case III. Appendicitis; lateral section; operation complicated by an enlarged gall-bladder; appendix amputated, and the stump inverted into the cæcal cavity; recovery. Mrs. E. S., aged 46, was admitted January 5, 1891, with symptoms of appendicitis which had existed for a week. Pain had been a prominent symptom, with elevation of temperature, abdominal distension, constipation, furred tongue, vomiting. Directly over the cæcal region there was a tumor which was movable and exceedingly painful upon pressure. There had been no chill and no sweating. The symptoms pointed to irritation or inflammation of the appendix or the pericæcal region, but not abscess. A lateral section was made on the eighth day. Upon

entering the abdominal cavity the tumor proved to be an immensely elongated and distended gall-bladder, which was about 5 inches in length, lying directly over the appendix region. A careful examination failed to show the presence of any gall-stones. The appendix was found inflamed and thickened, but quite free from any adhesions. The mesentery was then ligatured and cut away, as well as was the appendix. The stump of the latter was then inverted and invaginated into the caecal cavity. The peritoneum was then brought together over the inverted stump by five Lembert sutures. No drainage was used, and the wound was closed with a few sutures. On the twenty first day the patient left the hospital in good condition.

ACTION OF SULPHO CALCINE IN DIPHTHERIA AND CATARRH.

By J. S. KENNEDY, M.D.

SOME time since I saw a notice in a medical publication of sulpho calcine in the treatment of diphtheria, and sent to Reed & Carnrick, of New York, for a sample. This was promptly sent, and in the following cases used with such marked benefit that I think it deserves a high place in the materia medica of that disease so fatal to childhood.

Case I. Daniel S., son of grocer, aged 4 years; specific diphtheria, with the usual exudation of membrane and glandular enlargements. The case had passed the period of injection of the mucous membrane and had assumed the grayish-white appearance on palate, tonsils, fauces, and extending into the larynx and air-passages.

Gave Dr. Kene's prescription of—

R Hydr. bichloridi, . . . gr. j.
Vini pepsinae,
Aqua, ... ʒij.—M.
M. Sig.: Teaspoonful every two hours.

And also ordered—

R Sulpho-calcine, . . . ½ ounce.
Reed & Carnrick.

Sig.: Apply with camel-hair brush every hour, in combination with the frequent use of a gargle of ½ ounce of sulpho-calcine to ½ pint of water.

On visiting the patient the next day, the membrane had virtually disappeared and left in its stead a healthy appearance.

Case II. Henry B., aged 3 years; diphtheritic membrane pronounced; high fever, considerable swelling, violent headache, and great

debility, with vomiting, and the membranes firmly adherent. Ordered the same treatment as in Case I, and with the same success.

Case III. Edward S. The same treatment was used for four days. Improvement was noticed the fifth day, and from that on the recovery was rapid; the debility was overcome by bovine.

I have every reason to consider sulpho calcine a veritable specific and the only preparation that deserves the name. Its composition of calcii oxydum purum, flores sulphuris loti, benzo-boracic acid, ol. eucalyptus globulus, ol. gaultheria, and ext. pancreaticum shows at a glance that it contains ingredients which in the past have been of the most material benefit in the treatment of diphtheria, and in my opinion there is nothing which, on a fair trial, will give such perfect results.

In a case of chronic catarrh of twenty years' standing I used sulpho calcine, and after three weeks' trial the patient was able to smell cooking,—something he had not done for years. At this time he continues to improve.

CHAMBERSBURG, PA.

PUERPERAL SEPTICÆMIA.

By DR. JOHN GERDINE,
ATHENS, GA.

ON September 16, 1890, I was called to see Mrs. H., naturally a very delicate woman, and found her eight months and one week pregnant. She was very nervous in regard to herself, dreading the approaching confinement, and had been very nervous during her entire pregnancy, and also quite debilitated. Her tongue and mouth had been sore for several weeks. The tongue was quite raw, and she was not able to take any nourishment except a small quantity of liquid food. The veins of right lower limb were very much distended, from the foot even to the labia. There was no general swelling of the limbs. She had night sweats and was constipated. I put her upon liquid pepsin, made of lactopeptine 5 grains, dilute nitro-muriatic acid 8 drops, tincture of belladonna 2 drops, at a dose three times daily,—a simple laxative,—with a mouth-wash. She improved gradually, and was confined October 6th. The labor was normal, lasting six and one-half hours. The loss of blood was slight. Two days after the labor she said that her mouth was perfectly well. She could and did eat heartily, and

enjoyed her meals. She went on extremely well for five days, eating and sleeping well, her bowels in good condition, the lochial discharge normal, no pain or tenderness, no headache or nervousness. The patient still had light night-sweats, though they were gradually growing less. Two days after her confinement I put her upon the elix. vitriol, 10 drops; tr. belladonna, 2 drops; tr. cinc. co., 1 drachm,—four times daily,—at 8, 12, 4, and 8 o'clock. On the fifth evening she had a chill, followed by slight fever. As I believed this to be her milk-fever, I still continued my prescription. On the seventh evening, however, she had another chill, followed by slight fever. I then gave, in addition, 5 grain doses of quinine for two days. The bowels acted well, with a light laxative each day. No fever or chill occurred on the eighth, ninth, or tenth day. On the evening of the eleventh day she had a violent hæmorrhage, and lost a very large quantity of blood. Soon after the hæmorrhage began she had a chill, with rigor, lasting about one hour, followed by quite a high fever, temperature 103° . The chill came on at 6 P.M.; the fever passed off by morning. As soon as the fever began to decline I put her on 3 grain quinine pills every two hours. That night she had headache, pain in the back and limbs, and slight tenderness over the womb. This was the only time that she had any pain, all of which vanished with the fever in profuse perspiration. On the twelfth and thirteenth days she was doing tolerably well, though she had no appetite and no movement of the bowels, together with more or less perspiration all the time. The lochial discharge was about normal, except that there was some unpleasant odor and appearance of pus. On the night of the 13th she had a rigor about 6 P.M., followed by a temperature of 105° . Another rigor occurred at 3 P.M. on the 14th, and a third at 3 A.M. Again, at 12 M. and at 3 P.M. on the 15th a severe chill occurred. The fever varied from 104° to 106° ,—sometimes higher, sometimes lower. The patient began to sink at 3 A.M. on the 16th, and died at 5.30 A.M.; died very quietly. My diagnosis was septicæmia or pyæmia, with ulceration or breaking of one of the large veins at the seat of the placental attachment, and abscess formed in the uterine walls, which broke internally, producing collapse and death. This was her sixth child.

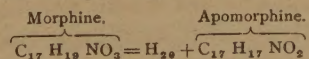
ON THE ACTION OF APOMORPHINE AND APOCODEINE, WITH REFERENCE TO THEIR VALUE AS EXPECTORANTS IN THE TREATMENT OF CHRONIC BRONCHITIS.

By WILLIAM MURRELL, M.D., F.R.C.P.,

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A.—APOMORPHINE.

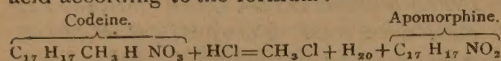
THE discovery of apomorphine is usually ascribed to Matthiessen and Wright, although there is reason to suppose that they were forestalled to some extent by Arppe. At a meeting of the Royal Society held on June 10, 1869, Mr. Augustus Matthiessen and Mr. C. R. A. Wright read a paper, received on May 6 of the same year, "On the Action of Hydrochloric Acid on Morphine,"* and in this communication they gave particulars of the mode of preparing a substance for which they proposed the name of "apomorphia." It is not necessary to give all the details of their method, but it practically amounted to this, that they took some morphine, sealed it up in a tube with a large excess of hydrochloric acid, and kept it at a temperature of from 140° to 150° for two or three hours. On breaking open the tube it was found to contain the hydrochlorate of the new base, apomorphine. It was purified by dissolving in water, adding an excess of bicarbonate of sodium, and extracting the precipitate with ether or chloroform. On shaking up the solution with hydrochloric acid the sides of the vessel became coated with crystals of the hydrochlorate. These were drained from the mother liquor, washed with cold water, recrystallized from hot water, and dried on bibulous paper or over sulphuric acid. This was the way in which they originally obtained their apomorphine; but they found, on further investigation, that the new base might also be prepared by digesting morphine with excess of hydrochloric acid for some days on a water-bath under paraffin. In this process the morphine loses an atom of water and becomes converted into apomorphine:—



They found that apomorphine might also be

* Proceedings of the Royal Society, vol. xvii, p. 455.

obtained by heating codeine with hydrochloric acid according to the formula :—



It is probable that in this reaction there is an intermediate product, but with this we are not, for the moment, concerned.

These same observers showed that apomorphine was formed when morphine was heated with dilute sulphuric acid in sealed tubes for some hours at a temperature of from 140° to 150° . This is pretty much what was done nearly a quarter of a century previously by Arppe,* his product, which was probably an impure sulphate of apomorphine, being subsequently named by Laurent and Gerhardt "sulphomorphide." This sulphomorphide turned green on exposure to light and air, and gave the reactions now ascribed to apomorphine.

In a paper by Matthiessen and Burnside,† the authors called attention to the fact that apomorphine might be prepared by heating morphine with chloride of zinc. This method of manufacture seems to have been suggested by E. L. Mayer,‡ who worked at the subject in conjunction with Matthiessen. The hydrochlorate of apomorphine prepared by these different methods was distinctly crystalline, and its crystalline form was determined by Professor W. H. Miller.§ When exposed for some time to the action of air and light it turned green, probably from oxidation. The reason for supposing that the change in color was due to oxidization was that, under these conditions, the salt increased in weight. The green mass was soluble in water, communicating to the solution a bright, emerald-green color. It dissolved in alcohol, forming a green solution in ether and benzol, giving a magnificent rose-purple, and in chloroform a violet-pink. It was found, too, that it gave certain characteristic color reactions with nitric acid, perchloride of iron, and other reagents.

Some of the specimens of apomorphine obtained by Matthiessen and Wright were submitted for investigation to Dr. Gee, who published two papers on the subject. The first of these was read before the Clinical Society,||

* "Ueber Eine Merkwürdige Veränderung des Morphins durch Schwefelsäure," *Annalen der Chemie und Pharmacie*, vol. xl, 1845, p. 96.

† Proceedings of the Royal Society, vol. xix, 1871, p. 71.

‡ Berichte deutsch. chem. Gesell., Berlin, 1871, vol. iv, p. 121.

§ Proceedings of the Royal Society, vol. xviii, p. 88.

|| On the Action of a New Organic Base, Apomorphia. Transactions of the Clinical Society, vol. ii, 1869, p. 106.

and the second was published in the Bartholomew's Hospital Reports.* Dr. Gee established the fact that when the hydrochlorate of apomorphine was injected subcutaneously in doses of $\frac{1}{10}$ grain, it acted as a speedy emetic. He also mentioned the circumstance that "a gentleman who was working with the new base, and who had his hands sometimes wetted with the solutions, frequently vomited three or four times in the course of the evening," presumably from its absorption by the skin. Dr. Gee seems also to have supposed that it acted equally well as an emetic when taken by the mouth, for he quoted the case of a man who, after taking $\frac{1}{8}$ grain, "felt dizzy and depressed, with an uncomfortable sensation in the head, and vomited freely in twenty-five minutes." That this was not regarded as exceptional seems to be established by the fact that in a summary of the advantages of the drug, Dr. Gee says: "As much can be raised by the tip of the little finger as will cause vomiting when taken by the mouth," and in his second paper he adds: "To the best of my knowledge, apomorphine has never been administered in an emetic dose (namely, $\frac{1}{10}$ grain subcutaneously or $\frac{1}{4}$ grain by the mouth) without producing speedy vomiting."

During the next four or five years a good many papers appeared on the action and properties of apomorphine, the most noteworthy contributions being by Dujardin-Beaumetz, of Paris;† Siebert, of Dorpat;‡ Max Quehl§ (under the direction of Professor Köhler), Bourgeois,|| Routy,¶ Carville, Charcot, Choupe,** Trousseau and Pidoux, Théodore Verger,†† Vulpian and Juratzs ‡‡ Reichert, in an inaugural thesis published in 1880, gave an elaborate account of its physiological action, but no serious attempt seems to have been made to controvert the statement that it uniformly acted as an emetic when administered in small doses by the stomach. It was pretty generally accepted that it produced emesis by whatever

* Note upon Apomorphia and Chlorocoeide, vol. v, 1869, p. 215.

† Bulletin Général de Thérapeutique, October 30, 1874.

‡ Untersuchungen ueber die physiologischen Wirkungen des Apomorphins, Dorpat, 1871.

§ Ueber die physiologischen Wirkungen des Apomorphins, Halle, 1872.

|| De l'Apomorphine, Recherches cliniques sur un nouvel Émétique, Paris, 1874.

¶ De l'Emploi de l'Apomorphine comme Vomitif administrée par Injection hypodermique, Paris, 1874.

** Gaz. hebdomadaire, December, 1874.

†† Bull. de Thérap., No. 32, p. 499, 1877.

‡‡ Centralblatt f. d. med. Wiss., p. 499, 1874.

channel it was introduced into the system, and that solutions could not be employed with safety when once they had commenced to change color.

In 1881, being anxious to obtain a good emetic for use in cases of poisoning, I made some observations on apomorphine, and found (1) that it acted promptly as an emetic when injected hypodermatically; (2) that no emetic effect was produced when given by the stomach in small doses; (3) that its properties were not impaired by keeping; and (4) that it differed so completely in action from morphine that there was no reason why it should not be given as an emetic in cases of poisoning by opium. As a proof that the drug does not deteriorate by keeping, I may mention that I gave a patient a hypodermatic injection of $4\frac{1}{2}$ minims of a 1-in-50 solution of the hydrochlorate, which had been exposed to the light for three months and had assumed a dark-green color, and in less than two minutes it acted powerfully and completely evacuated the stomach. Six months later I used the same solution in the same dose for another patient, and it acted equally promptly, the patient vomiting at intervals for over an hour.

In the British Pharmacopœia of 1885, the *injection apomorphinæ hypodermica* (1 in 50) was made officinal, with the misleading direction that "the solution should be made as required for use." About this time attention was directed on the Continent to the use of apomorphine as an expectorant. Juratzs recommended it for internal use for this purpose in doses of from $\frac{1}{6}$ to $\frac{1}{2}$ grain. He gave it in a mixture with simple syrup and a few drops of hydrochloric acid. In 1881 Beck* advocated its use in doses of $\frac{1}{8}$ grain every three or four hours; and in 1882 Rossbach† published some cases in which he had administered it in doses of from 5 milligrammes to 1 centigramme, or from $\frac{1}{13}$ to $\frac{1}{8}$ grain. Dr. Wertner,‡ of Wartberg, in Hungary, used it in doses of 2 centigrammes, or $\frac{1}{3}$ grain. One of Wertner's cases is interesting, the patient having by accident taken, without serious inconvenience, ten times the dose intended, or over 3 grains. The only English writer who appears to have paid any attention to the subject is Dr. Charteris, of Glasgow, who, in

a communication published in 1881, mentions casually that on two occasions he gave $\frac{1}{2}$ grain by mouth without any bad result.

Some three years ago, whilst casting about for a new expectorant for use in cases of bronchitis, I determined to try the hydrochlorate of apomorphine by mouth. My first endeavor was to determine the dose. At first I gave it in very small doses, for I was impressed by Dr. Gee's very positive statement that in doses of $\frac{1}{4}$ grain it uniformly acted as an emetic. I had to feel my way cautiously, for the majority of my patients were out-patients whom I saw but once a week, and I was especially anxious to avoid giving anything like an overdose. For convenience of dispensing, I usually employed a 1-per-cent. solution, and not the 2-per-cent. solution of the pharmacopœia. I began with a 5-minim dose (gr. $\frac{1}{20}$), and worked my way up, drop by drop, until I found that the majority of my patients could take a grain of apomorphine three times a day without inconvenience. Of late I have considerably exceeded this dose, and I have now under treatment several patients who take $1\frac{1}{2}$ or 2 grains three times a day without any difficulty. I have not kept notes of all the cases treated by this method, but I have full notes of 40 patients who have been under observation during the present winter. The majority were out-patients at the Westminster Hospital, a few were under my care in the wards, and a still smaller number were private patients. With one or two exceptions, to which I will presently refer, they were all suffering with what, for the sake of convenience, may be called "winter cough;" that is to say, bronchial catarrh or chronic bronchitis, with or without emphysema. Some of the patients were men, others were women. The list included a man aged 76, another aged 71, a third aged 70, and two children, whose ages were respectively 5 months and 7 months.

On finding that such large doses could be given with impunity, I experienced some doubt as to the purity of the drug. I made inquiries as to the source of the supply, and found that several different specimens had been used for making the solution, and that they had been obtained in the ordinary course from the chemists who supply the hospital with drugs. Most of them were crystalline, and answered to the ordinary description of apomorphine as given in the pharmacopœia, but one or two were

* Deutsche med. Wochen., February, 1881.

† Berlin. klin. Wochen, No. 27.

‡ Pesther med. chir. Presse, Nos. 18 and 19, 1882.

amorphous. I tested them, and found that they all gave the ordinary color reactions with nitric acid and with perchloride of iron, as described by Matthiessen and Wright, and adopted in the British Pharmacopœia.

It was obviously necessary to ascertain if the apomorphine I was using would produce an emetic effect if injected hypodermatically. In out-patient practice it is rarely necessary to give emetics, but fortunately there happened to be in the wards a lad about 16 for whom an emetic was required. He was admitted for chorea, but was suddenly seized with an acute attack of dyspepsia. The house-physician, Mr. A. M. Cato, gave him, at my suggestion, a hypodermatic injection of 5 minims of a 2-per-cent. solution of the hydrochlorate dispensed from the particular specimen of the drug at that time in use for the out-patients; it had not been long prepared, but was dark green in color. The injection was administered in the forearm, and the patient vomited in thirty-five seconds. The onset of the vomiting was so sudden that he had no time to avail himself of the porringer which had been placed in readiness, but deposited the contents of his stomach on the floor. The vomiting continued at intervals of four or five hours, with much relief to the patient. His chorea seemed to be so much better that on the 25th he was ordered 5 minims of the same solution three times a day by mouth. On December 2d this was increased to 10 minims, on the 8th to 15 minims, on the 9th to 30 minims, and on the 16th to 40 minims, without the production of any emetic effect. The medicine was given in the ordinary course, and there was no doubt that he took it. One thing was perfectly clear, that a patient who was made violently sick by $\frac{1}{6}$ grain given hypodermatically could take $\frac{2}{3}$ grain by mouth three times a day, or $2\frac{2}{3}$ grains daily, without the slightest inconvenience.

In the majority of cases the apomorphine was given in the form of solution, but in one or two cases I had it made into pills. A patient aged 21 came to me suffering from well-marked phthisis. He had had a cough for three years, and had on four occasions suffered from profuse hæmoptysis. He had a moist cavity at the base of the right lung, and rhonchus was to be heard all over the chest on both sides. On December 21st I ordered him $\frac{1}{10}$ grain of hydrochlorate of apomorphine, to be taken three times a day, and on the 28th $\frac{1}{4}$

grain three times a day. On the 31st the dose was increased to $\frac{1}{2}$ grain three times a day, and on January 4th to 1 grain three times a day. The pills were taken after meals, and the only effect was to make him expectorate very freely. On January 6th he was ordered a pill containing $1\frac{1}{4}$ grains three times a day. He took twelve pills, and then complained that they made him feel rather sick, but not enough to cause him any inconvenience. On January 10th he was ordered $1\frac{1}{2}$ grains three times a day, and this seems to have exhausted his capabilities in this direction, for he took only five of them, and said he was unable to continue the treatment on account of the nausea they produced. I may mention that this was not a hospital patient, and that every precaution was taken to obtain a reliable specimen of the drug.

Although these large doses of apomorphine, when given by mouth, failed to produce either nausea or emesis, they exerted a powerful expectorant action in cases of chronic bronchitis. I give a brief abstract of a typical case which occurred in hospital practice.

W. A., aged 67, is a horse-keeper by occupation, and is engaged in omnibus work. Is in the yard, exposed to all weathers, from 6 in the morning till 8 at night. Is well enough in the summer, but has had a bad cough every winter for the last fifteen years. He coughs all day, and expectorates in the intervals. Has lost flesh a little this winter, but not more than usual. On examination it is found that the chest is emphysematous, that expiration is prolonged, and that there is moist rhonchus all over, but especially at the bases posteriorly. On November 12th he was ordered $\frac{1}{2}$ drachm of the 1-per-cent. solution three times a day, with syrup of tar. On November 15th he reported that he had expectorated a great deal, and, to use his own words, he "regular vomited it up;" but he was not sick. The dose was increased to 1 drachm three times a day. On the 19th he said that the phlegm came up "much easier," and that the medicine "cleared the chest," and "made the breath freer." The dose was increased to $1\frac{1}{2}$ drachms, and on the 22d, the improvement still continuing, to 2 drachms three times a day. On December 3d he was ordered 3 drachms three times a day. He reported that after the first dose he brought up in about half an hour quite half a pint of thick, yellow phlegm; it was all

phlegm each time, and there was no food with it. On December 6th the dose was increased to 200 minims three times a day, or 6 grains daily. This, too, gave him great relief, and caused him no inconvenience. There was no headache and no nausea. This apomorphine, when given to another patient hypodermatically, in a dose of $\frac{1}{30}$ grain, produced vomiting in less than a minute. I have no doubt that for the production of its expectorant action large doses are much more efficacious than small ones.

In a few cases, apomorphine given by mouth produced nausea and vomiting. One patient, an Irish-American, and a gas-worker by occupation, had taken a drachm of the 1-per-cent. solution three times a day for ten days without complaint. He was then ordered 2 drachms of the same solution once a day. Three days later he returned and said that it had made him violently sick. On inquiry, it was found that he had taken it in the morning, on an empty stomach. He was directed to take it after breakfast, and from that time experienced no inconvenience. The dose was subsequently increased to $2\frac{1}{2}$ drachms three times a day, but there was no further complaint.

An almost identical case was that of a woman aged 52. She was ordered a drachm of the 1-per-cent. solution once a day for four days, and took it every morning before breakfast. Three mornings it made her feel sick, and on the fourth she actually vomited. She was then told to take the medicine immediately after dinner, and did so for four days without vomiting or experiencing any nausea. She was then ordered $1\frac{1}{2}$ drachms once a day. Two mornings she took it before breakfast and was sick, and on the other two days she took it after breakfast and was not sick. She then took $2\frac{1}{2}$ drachms three times a day without difficulty, and subsequently 3 drachms three times a day, or 5.4 grains a day, with much benefit to the chronic bronchitis from which she suffered.

Even when the patient complains of nausea it does not follow that it is due to the action of the drug. A hysterical girl of 17 complained that she was sick after each dose, but, as on investigation it was found that she was sick "as soon as she looked at the bottle," very little importance was attached to her statement. A patient aged 33, a carman, was admitted into the wards suffering from phthisis, the physical signs being dullness at both apices and deficient

movement, with coarse breathing all over the left front. He was ordered $\frac{1}{2}$ drachm of the 1-per-cent. solution three times a day, and suffered from an attack of vomiting every morning. The medicine was at once discontinued, but the vomiting persisted, and was evidently the result of the violent cough from which he suffered, especially in the morning. A small dose of morphine promptly arrested it.

It is somewhat difficult to reconcile my results with those obtained by Dr. Gee. It may be urged that the specimens used by him, having been obtained direct from Matthiessen and Wright, were pure, while mine were adulterated. The fact that my specimens gave the ordinary reactions of apomorphine cannot be accepted as conclusive evidence that they were pure, for it must be remembered that the color tests for apomorphine are very delicate, and that a small percentage of the drug mixed with some inert substance, such as sugar of milk, would give them almost equally well. One point in favor of the purity of the specimens I employed was that most of them were crystalline. My colleague, Dr. Dupré, F.R.S., very kindly undertook an examination of the specimen which had been chiefly employed in making the solution, and was of opinion that it was pure. It not only gave the chemical reactions of apomorphine, but, on microscopical examination, it was seen that almost every particle was distinctly crystalline. He was satisfied that the impurity, if any, did not amount to more than 1 per cent.

It may, too, be urged that my solutions had undergone some chemical change by long keeping, and that they had deteriorated. In answer to this, I may say that, although some of the solutions employed had been prepared for some time and had turned green, others were made as required for use, and dispensed on the spot. An argument against the age of the specimen being the important factor is to be found in the fact already quoted, that a 2-per-cent. solution which had been kept exposed to the light for a period of six months acted promptly as an emetic when injected hypodermatically.

Then, too, it might be said that, as I usually commenced with small doses and worked up to big ones, a condition of tolerance was in some cases established. This explanation will not suffice, for in some cases I commenced with half-drachm or drachm doses of the 1-per-cent.

solution three times a day. Possibly the substance which we now call apomorphine is not identical with that submitted to Dr. Gee twenty years ago. There are, as we know, some four or five different methods of preparing apomorphine, and it may be that the product is not identical in every case. This is a possible explanation, but not at all a likely one. At all events, I know experimentally that the action of apomorphine prepared from codeine is identical with that of the apomorphine prepared from morphine.

Another possible explanation is that apomorphine, being a somewhat unstable body, undergoes some chemical change in the stomach. This, again, is not probable, for it will be remembered that hydrochloric acid is used in the preparation of the alkaloid, and there is no reason for supposing that the pepsin would in any way alter its chemical composition. The rate of absorption has probably more to do with it. When injected hypodermatically it is absorbed at once, but when mixed with food in the stomach it is probably absorbed comparatively slowly. The fact that apomorphine administered on an empty stomach produces vomiting more readily than when given after meals throws some light on the subject.

With the view of testing the question of the rapidity of absorption, I administered what would be an emetic dose of apomorphine if given hypodermatically in the form of an ointment. I had three specimens prepared,—one with lard, one with vaseline, and one with lanolin, each containing $\frac{1}{10}$ grain to the drachm. They were given to three different patients, with instructions that they should be rubbed into the chest before the fire at bed time. They produced no emetic effect. The strength of the ointment was then increased in each case to $\frac{1}{5}$ grain, and the result was the same. I subsequently employed an ointment containing a grain of apomorphine mixed with an ounce of lard or lanolin, directing the patient to rub in half the quantity on two consecutive nights. It acted as an expectorant, the effect lasting for some hours, but it induced no nausea. I repeated this in several cases, and the result was always the same. I presume that the fact of the drug being comparatively slowly absorbed affords an explanation of what at first sight appears an anomalous result. Practically it is a decided advantage to have at our disposal a drug which may be relied on to induce an ex-

pectorant effect when used in the form of an ointment. In the case of children suffering from bronchitis it is simply invaluable.

I have also employed apomorphine as a spray, on the lines of the old ipecacuanha-wine treatment. I used for its administration a bottle with a conical bottom, the silver tube reaching to the apex, so that the whole of the solution could be utilized. I took care to observe the recognized precautions in such cases, using a warm solution, making the patient spit out the fluid which accumulated in the mouth, instructing him not to arch his tongue against the roof of the mouth, and making him inspire deeply with every contraction of the air-ball. I began with 10 minims of 1-per-cent. solution in a little water for each inhalation, but I now frequently give as much as half a drachm as a dose. The expectorant effect is very marked, especially with the large doses. The results have exceeded my expectations, and I hope to give details of this method of treatment in a future communication. The point of interest with regard to the action of apomorphine is, that a dose which would act as an emetic, if administered hypodermatically, can be used as an inhalation without inducing this effect.

Several writers have stated that apomorphine may, under exceptional circumstances, induce narcotic effects. I have notes of three cases which bear on this point; the first was a patient aged 67, a stock-broker, who was under treatment for chronic bronchitis. I prescribed a mixture containing 10 minims of the 2 per-cent. solution of hydrochlorate of apomorphine to be taken three times a day. He returned at the expiration of a week, and said that the medicine had made him expectorate freely, but that he could not continue taking it, as it made him sleepy. On expressing my surprise, he added that "morphine always disagreed with him." He had evidently been trying to read my prescription, and detecting, as he thought, the word "morphia," had experienced the sensations which, from former experience, he had been accustomed to associate with that drug. On explaining the matter to him, he was perfectly satisfied, and continued taking the drug without any further complaint as to its narcotic action. I may mention incidentally that several of my patients have objected to taking "apomorphine" on the ground that "morphine never agreed with them." In another case, a patient aged 58, a cattle sales-

man, took a drachm of the 1-per-cent. solution three times a day for a week without difficulty. I then increased the dose to 2 drachms three times a day, and the patient complained that it gave him a sharp pain across the forehead and over the bridge of the nose, and made him feel so sleepy that he could hardly keep his eyes open. Curiously enough, on increasing the dose to $2\frac{1}{4}$ drachms three times a day, he made no complaint. The medicine was then discontinued, but a month later he was given a drachm and a half three times a day. It caused him no inconvenience until the fifth day, when there was a slight return of the drowsiness and headache. He again discontinued taking it. Mr. Betts, the house surgeon at the Westminster Hospital, gave a casualty patient 5 minims of the same solution hypodermatically, and it not only failed to produce vomiting, but made him drowsy and contracted his pupils. This result was so exceptional that I am inclined to think that the apomorphine must in some inexplicable manner have become mixed with morphine. The specimen was submitted to Dr. Dupré for examination, but, unfortunately, the quantity was too small to enable him to give a decided opinion. It will be remembered that ether is used as a solvent in the preparation of apomorphine, and it is usually stated that morphine is insoluble in that menstruum, but I am informed on reliable authority that this insolubility is not complete. Professor Wormley, in his "Microchemistry of Poisons,"* states that morphine requires 7725 parts of absolute ether for its solution, and that commercial ether dissolves 1 part of the alkaloid in 4225 parts of the liquid.

There is no reason why apomorphine should not be given in combination with morphine. Rossbach speaks highly of this mixture in the treatment of phthisis, and says that it lessens the frequency of the cough and increases the fluidity of the sputum. Lauder Brunton says: "When apomorphine and morphine are given together, they do not destroy each other's action; so that from the combination we get increased secretion from the mucous membrane, with diminished irritability of the respiratory centre and consequently lessened cough. The cases in which the combination is useful are those where there is difficulty in breathing, continual cough, and thick, tenacious mucus."

In the majority of cases of winter cough which have been under treatment I have given the apomorphine in a mixture flavored with either syrup of Virginia prune, syrup of tar, or syrup of lemons. I do not know that this is the best form in which to give it, especially as in some cases the mixture after a time assumes a dirty-green color; but there are so many color reactions for apomorphine that our pharmacists should have no difficulty in devising a formula which would meet this objection. The addition of a few drops of nitro-hydrochloric acid to the mixture is advantageous.

I have treated a few cases of bronchorrhœa with small doses of apomorphine with success. On November 5th, Dr. Edgeworth, of Bristol, England, wrote to me saying that he had suffered from a cough every year for many winters, and that fifty or sixty times a day he expectorated a large quantity of frothy phlegm. I ventured to suggest that he should take $\frac{1}{12}$ grain of apomorphine in a teaspoonful of syrup of tar every two or three hours. On December 9th he wrote, saying that the expectoration had been reduced by quite one-half, and that he rarely expectorated more than twelve times a day. He added that at first he had experienced some difficulty in taking the syrup of tar made according to the United States Pharmacopœia formula, but that on substituting glycerin for the sugar the difficulty had at once disappeared. He says: "I think the alteration is a good one for general use," and in this expression of opinion I certainly agree with him. In the French Codex there is a preparation of tar known as "glycéré de goudron," but it is made with glycerin of starch, and not with glycerin.

Apomorphine has, in addition, been used with success for a variety of purposes: to remove foreign bodies from the œsophagus, to ward off an attack of epilepsy, to check hæmoptysis and post-partum hæmorrhage, and in the treatment of chorea, laryngismus stridulus, and whooping cough.

B.—APOCODEINE.

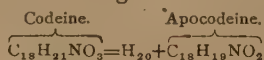
In 1869 Matthiessen and Wright published two papers* on the "Action of Hydrochloric Acid on Codeia," but seem to have experienced some difficulty in arriving at any definite result. In 1870 Matthiessen and Burnside published a paper† on the "Action of Chlo-

* J. B. Lippincott, Philadelphia, 1885.

* Proceedings of the Royal Society, vol. xvii, p. 460, and vol. xviii, p. 83.

† *Ibid.*, vol. xix, p. 71.

ride of Zinc on Codeia," in which they describe in minute detail the method of obtaining apocodeine when hydrochlorate of codeia is heated for fifteen minutes at a temperature of from 170° to 180° C. with a concentrated solution of chloride of zinc, decomposition taking place according to the reaction:—



On cooling, a yellowish-brown, tarry mass separates from the liquid, and may, on further cooling, be drawn into thin threads and obtained almost free from the excess of chloride of zinc. This amorphous, silk-like mass is almost pure hydrochlorate of apocodeine. To obtain the base the hydrochlorate is dissolved in hot water and precipitated by hydrochloric acid. The liquid containing the precipitated hydrochlorate is allowed to cool, and the precipitate, on solidifying, is separated from the acid solution. The operation of dissolving and re-precipitating with hydrochloric acid is repeated several times, and, lastly, the hydrochlorate is dissolved in water, precipitated with carbonate of sodium, and the base extracted with ether. On evaporating the solution in ether, the base remains behind as an amorphous, gum-like, reddish mass, which is subsequently powdered and dried in a water-bath.

Apocodeine itself is soluble in alcohol, ether, and chloroform, but is almost insoluble in water, and has not been obtained in a crystalline form. The hydrochlorate obtained by shaking the solution of the pure base in ether with hydrochloric acid and evaporating to dryness is freely soluble in water, but is not crystalline. The action of reagents on apomorphine and on apocodeine is almost identical, with the exception that the blood-red color yielded with nitric acid is much more permanent with apocodeine than with apomorphine. Between the two bases a marked difference was found to exist with respect to stability, apocodeine being in this respect far in advance of apomorphine; the hydrochlorates also differ, for the apomorphine salt is crystalline, whilst the apocodeine is amorphous. The preparation of apocodeine is easy and simple, yielding a very large product; and in this respect, too, it differs very materially from apomorphine, the preparation of which is tedious, whilst the yield is uncertain.

The apocodeine prepared by Matthiessen

and Burnside was submitted for examination to Dr. J. Wickham Legg, who, in a paper entitled "Observations on the Physiological Action of Apocodeia and of the Hydrochlorate of Cotarnamic Acid," reported* that "when given in doses of 1, 2, or 3 grains to a healthy man, no appreciable effect was produced." He added: "It is obvious that apocodeine is wholly unfitted for subcutaneous injection. In the only instance in which it was practiced $\frac{1}{10}$ grain injected under the skin of the forearm produced great redness, tingling, and considerable suffering for more than a week." His observations appear not to have been carried beyond this point.

Dr. Dujardin-Beaumetz states that apocodeine possesses all the therapeutic properties of apomorphine, but in a modified degree. He says that it is an emetic, and has been found useful in the treatment of hæmoptysis, croup, and whooping-cough. He recommends it hypodermatically in doses of $\frac{1}{4}$ grain and by the mouth in doses of $\frac{2}{3}$ grain. I have been unable to find any other account of the use of the drug in the treatment of disease.

In 1881, whilst working at apomorphine, I made some observations with apocodeine with the view of ascertaining its possible value as an emetic in cases of poisoning. I took care to obtain a reliable specimen, and administered to two patients hypodermatically 15 minims of a freshly prepared 1-in-50 solution, but without exciting either nausea or vomiting. Both patients vomited promptly after an injection of 5 minims of a 1-in-50 solution of hydrochlorate of apomorphine. The hydrochlorate of apocodeine employed was amorphous.

During the last few months I have repeated these observations. A patient aged 48 was under my care, suffering from chronic bronchitis. His cough was very violent, he was emphysematous, and moist rhonchus was to be heard in abundance over both front and back. On November 5th I gave him an injection of 5 minims of a 1-per-cent. solution of hydrochlorate of apocodeine, but no effect was produced. On November 8th I gave him an injection of 15 minims of the same solution. In eleven minutes he commenced expectorating freely, and the expectoration continued during the rest of the day. He was not sick, and there was no irritation at the seat of injection. On November 12th he was given an injection of

* Bartholomew's Hospital Reports, vol. vi, p. 97.

15 minims of the solution in the right arm and 5 minims in the left. He again expectorated freely, but there was neither nausea nor vomiting. This time he complained that the injection made his arm sore. There was a good deal of tenderness and swelling, which persisted for some days, but there was no abscess. I tested the solution with litmus-paper, and found that it was acid. I then reverted to the specimen of apocodeine used in 1881, and I had a 1-in-50 solution prepared which was perfectly neutral. The same patient was given an injection of 20 minims of this solution—10 in the right arm and 10 in the left. This, too, acted as a powerful expectorant, but fortunately produced very little local irritation.

A freshly-prepared specimen of the salt having been placed at my disposal, it was made into a 1-in-50 solution, and used in the case of a man aged 31, a gas-stoker, who for many years had suffered from chronic bronchitis. On January 6th a hypodermatic injection was given of 10 minims in each arm, or $\frac{2}{3}$ grain. He reported that he felt "a little bit queer" after the injection "just for a moment," but it did not make him feel sick. The arms smarted just a little for about an hour, but he did not notice anything the matter with them after that. On January 9th the same solution was used, and he was given a hypodermatic injection of 10 minims in the right arm and 15 in the left, or $\frac{1}{2}$ grain in all. It caused him to expectorate very freely, but he suffered no inconvenience, and the smarting in the arms was very slight. The solution employed in the case was perfectly neutral. In the face of these observations I cannot confirm Dr. Wickham Legg's statement that apocodeine is "wholly unfitted for subcutaneous injection." All that is necessary is to use a neutral solution.

In 6 cases I have used apocodeine by mouth as an expectorant with satisfactory results. The first patient was 70 years of age and had long been under treatment. On September 24th he was ordered 10 minims of a 1-per-cent. solution three times a day; on October 1st the dose was increased to 20 minims three times a day, on October 9th to 25 minims, and on October 29th to $\frac{1}{2}$ drachm. He expectorated very freely, indeed, especially after the larger doses, but there was no complaint of nausea or vomiting. In the case of another patient, aged 71, the dose was gradually increased from 10 minims to $\frac{1}{2}$ drachm

three times a day, and again it answered well as an expectorant and produced no disagreeable symptoms. This patient in six weeks took 28 grains of apocodeine. In 1 case, and 1 only, the apocodeine produced nausea and vomiting. The patient was a boy, aged 17, an artist's model, who suffered from neurotic asthma. From April 23d to June 25th he was on apomorphine, the dose being gradually increased from 15 to 50 minims three times a day. During this period he took nearly a drachm of the hydrochlorate of apomorphine, not only without the production of any unpleasant symptom, but with marked relief to his attacks of dyspnoea. On July 16th he was ordered 5 minims of the 1 per-cent. solution of apocodeine three times a day, the dose being week by week increased by 5 minims at a dose. There was no complaint until, on October 1st, the patient was ordered 20 minims three times a day. He then stated that it made him feel sick, and that he was "unable to keep it down." He took twelve doses, and usually vomited about two hours after each dose. On October 8th the dose was reduced to 15 minims three times a day, which he took without difficulty. On October 15th the dose was again increased to 20 minims three times a day, and this he took for a fortnight without suffering from vomiting, although he admitted that he usually felt sick after each dose. He took in all 24 grains of apocodeine.

The hydrochlorate of apocodeine acts as a powerful expectorant when given in the form of a pill. From 3 to 4 grains may be administered daily with perfect safety.

These observations on apocodeine are admittedly incomplete, but the supply of material at my command was limited.

WEYMOUTH STREET, PORTLAND PLACE, LONDON, ENG.

DR. HARRISON L. METTLER, of Philadelphia, has removed to Chicago, and we learn he will continue to devote much of his attention to nervous diseases.

RESIGNATION.—Dr. William F. Waugh has resigned the chair of Theory and Practice of Medicine in the Medico-Chirurgical College of Philadelphia.

KOCH'S TREATMENT.—Prof. Ernest Laplace gave a lecture in the arena of the Medico-Chirurgical College of Philadelphia, Monday evening, February 16th, on "Koch's Treatment of Tuberculosis in its Relation to Bacteriology," with presentation of cases treated.

ABSTRACTS.

TREATMENT OF INGROWN NAIL.—In this affection H. Pürckhauer, of Bamberg, employs with entire success a method at once efficacious and easily practiced. It possesses, moreover, the advantage over the radical operations usually performed that it does not for a single moment deprive the patient of his liberty of action and ability to work. Dr. Pürckhauer begins by painting the portion of nail which needs to be removed with a 40 per-cent. solution of caustic potash. At the end of a few seconds the upper layer of the nail has become soft, and can be scraped off "like butter" with a sharp-edged piece of glass, but only with glass. The painting with potash and scraping are continued until all that remains of that portion of the nail is a scale as thin as a leaf of paper. This scale can be grasped by the forceps beyond the swollen soft tissues, by which it is covered, and removed by means of a pair of fine scissors. This done, the patient is cured, without having lost a drop of blood or felt the slightest pain, and can immediately pursue his business, for no further treatment is necessary. If, when the nail is subsequently reproduced, pain re-appears, the corresponding portion of the nail may be softened by the same procedure and will not need to be excised.—*La Gazette Médicale de Montréal*, December, 1890.

EPIDEMIC ICTERUS.—This, says Arthur Hennig, of Königsberg, is not so harmless a disease as some (D'Espine, Picot) consider, but is probably an infectious disorder *sui generis*, as the writer, from a number of house-epidemics observed by himself and others, believes. In a certain family a robust child, 2½ years old, was attacked with symptoms of a moderately severe gastro duodenal catarrh, with a trifling enlargement of the liver, languor, restlessness, and slight irritation of the kidneys. Under the usual treatment the general condition improved within a few days; the icterode hue and the coloration of the fæces persisted for a time, and the spleen was distinctly enlarged. In a few days more, however, these manifestations disappeared. About ten days later a sister, aged 3½ years, was seized with similar but more severe symptoms, suffering at the same time with active delirium,

severe headache, pains in the joints, etc. A few days after the second child sickened, a third, 3 years of age, living in the same house, on the floor below, fell ill, and, finally, the 5-year-old brother of the last patient. Meanwhile, the parents of the first two children had been seized with severe symptoms, which, in the mother's case, led to an abortion. A similar house-epidemic of icterus was observed by Dr. Theodor. In this, the mother, maid-servants, and five children were attacked, while only the father and the sixth child escaped. The writer received from Professor Schreiber particulars of a third epidemic, in which three children of a family were similarly affected, the parents and three other children remaining in good health. Such epidemics are no new phenomenon. Since 1699 eighty-six have been recorded, and are tabulated by the author. Most of these were mild, but now and then a fatal case occurred. The disease is especially dangerous to women who are pregnant or who have lately been confined. Dampness of the weather, being thoroughly chilled or wet, and dietetic errors have long been regarded as standing in etiological relation to the disease. In other cases a specific infectious origin has been indicated. The author considered that his cases had arisen from the use of the Königsberg city-water, which is rich in micro-organisms. He believes with other writers (Botkin, Ketsch, Heitler) that this form of icterus is a systemic disease, of infectious nature, but not contagious, sporadic, endemic, and epidemic, generally of benign character, and never recurring. The infecting agent develops abundantly outside the body in company with the germs of malaria and typhoid fever, for it sometimes prevails simultaneously with typhoid fever. It should be termed infectious icterus in contradistinction to simple catarrhal and obstructive jaundice, since the constitutional manifestations are always more or less predominant, while the last display themselves from the first as local affections with associated gastric symptoms. As to treatment, the author advises, without regard to the origin, a large preliminary dose of calomel, followed by irrigation of the bowel, according to Krull's method, and a regulated diet strictly free from fat. Hydrochloric acid is also given internally. In certain cases faradization of the gall-bladder is advisable.—*Deutsche Med. Zeitung*, November 17, 1890.

CERVICO-BRACHIAL PHLEBITIS IN TYPHOID FEVER.—Dr. Girode reports the case of an extremely hysterical girl, aged 17 years, who was attacked with typhoid fever. There were high fever, enlargement of the spleen; loose, ochre colored stools, and pronounced albuminuria. Roseola appeared on the eleventh day. During this time eighteen round worms were passed, some by the mouth, others by the anus. The fever remained high, but its curve was not characteristic. On the thirtieth day a general swelling of the right arm from the hand to the shoulder was perceived. During the succeeding week this swelling increased. At the same time a blood-stained sputum appeared. At the end of four weeks the process had subsided. The interesting features of the case are the unusual localization of phlebitis in the upper extremity and its early occurrence, as it is generally met with during the convalescent stage. As regards its pathogenesis, it might be regarded as a secondary affection, excited by the bacillus typhosus. The blood-stained sputum is possibly to be looked upon as indicative of minute pulmonary emboli.—*Deutsche Med. Zeitung*, December 29, 1890.

WHICH OF THE NEW ANTIPYRETICS SHOULD BE PREFERRED IN THE TREATMENT OF THE FEBRILE DISEASES OF CHILDREN?—Upon this subject Professor Demme, in the yearly report of the Children's Hospital at Berne, writes as follows. The study of the acute fevers of children has led me to the decided conviction that moderately high temperatures (38.5° to 39.5° C. = 101.3° to 103° F.), lasting but a few days, are best treated without recourse to any medicinal antipyretic. I believe that such cases are best managed by means of wet cloths wrapped around the body and methodically renewed every two hours. Experience has furthermore taught me that the nervous excitement and restlessness accompanying these moderate temperatures, the wakefulness or disturbed sleep not infrequently present, are most successfully combated by one or two lukewarm baths daily, the temperature of the water being 26° to 28° C. (78.8° to 82.4° F.), and the child kept in the bath for five or ten minutes. It is only when the fever-heat ascends to 40° C. (104° F.) or upward, and remains for sometime at that point, that the employment of an antipyretic drug is advisable and necessary. It is not, however, the temperature

alone, in and of itself considered, that should dictate our course, but the character of the existent disease-process and the actual condition of the patient. In my opinion, antipyretic medicines are most suitable to typhoid fever, acute articular rheumatism, and obstinate, progressive broncho-pneumonia. I avoid such drugs, or, at least, use them only exceptionally, in diphtheria, the acute exanthems (scarlet fever, measles, etc.), and simple croupous pneumonia. What I have already said concerning the employment of baths alone applies also to the combined use of baths and antipyretic drugs. Extremely seldom, and only according to a special indication of an extremely high degree of fever, do I seek to depress the temperature by means of a refrigerant bath. Usually, and with entirely satisfactory results, I employ the lukewarm baths of which I have spoken. When there is a tendency to sopor, or the face is of a deep-red or cyanotic hue, I am accustomed, while the patient is in the bath, to make use of intermittent affusion of the head and neck with water 3° to 4° C. (5.4° to 7.2° F.) cooler than that of the bath. This method yields excellent results.

In regard to the selection of a certain antipyretic to fulfill the indications mentioned, I prefer, in acute articular rheumatism, the salicylate of sodium, provided that it is well borne by the stomach; but if that remedy is repugnant to the taste, or if a tendency to vomiting or diarrhoea exists, I have recourse to salol. The salicylate of sodium may be given in daily doses of 0.5 to 1 gramme ($7\frac{1}{2}$ to 15 grains) to children of 2 to 4 years of age; from the 5th to the 10th year, 1 to 2 grammes (15 to 30 grains); and from 11 to 15, 2.5 to 3 grammes (38 to 45 grains). Single doses of salol are as follow: for children of 2 to 4 years, 0.25 to 0.35 gramme ($3\frac{3}{4}$ to $5\frac{1}{2}$ grains) thrice daily; from 5 to 10 years, 0.5 to 0.75 gramme ($7\frac{1}{2}$ to $11\frac{1}{4}$ grains) three or four times a day; from 11 to 15 years, from 0.75 to 1 gramme ($11\frac{1}{4}$ to 15 grains) three or four times a day. In typhoid fever I esteem the sulphate of thallin as the most valuable remedy, given every two hours, according to the Ehrlich-Lacquer method, in the following doses: from 3 to 4 years of age, 0.01 gramme (about $\frac{1}{4}$ grain); from 5 to 10 years, 0.02 gramme (about $\frac{1}{2}$ grain); from 11 to 15 years, 0.03 gramme to 0.05 gramme (about $\frac{1}{2}$

to $\frac{3}{4}$ grain). In that protracted form of broncho-pneumonia in which relapse and excessively high temperature ($41^{\circ}\text{C.} = 105.8^{\circ}\text{F}$ and above) are quite marked, I employ, in the first period of the recurrence, antipyrin, in aqueous solution, with the addition of a little sugar and a few drops of cognac. When given in this form it very seldom produces disturbance of the stomach. Antipyrin has very rarely failed to effect the desired reduction of temperature in such cases of broncho pneumonia as I have alluded to, in the course of acute exanthems, or severe diphtheria, and I am consequently able to give it an unconditional indorsement. I have found it most serviceably given at hourly intervals and in the following doses: to children of 2 to 4 years of age, 0.2 to 0.4 gramme (3 to 6 grains); from the 5th to the 10th year, 0.5 to 0.75 gramme ($7\frac{3}{4}$ to $11\frac{1}{2}$ grains); from the 11th to the 15th year, 0.8 to 1 gramme (12 to $15\frac{1}{2}$ grains). These doses, which I some years ago recommended, fulfill their purpose exactly, and it is incomprehensible to me that some writers should advise constantly-increasing doses, which overshoot the mark and occasion vomiting and collapse. If, in the later stage of the broncho-pneumonia of children, hectic fever occur, with high afternoon or evening temperatures and marked morning remissions, neither antipyrin nor any of the new antipyretics of the aromatic series is of much advantage. In this condition a far superior influence is exerted by quinine in doses of 0.2 to 0.4 gramme (3 to 6 grains) to children of 2 to 4 years; 0.5 gramme ($7\frac{3}{4}$ grains) from the 5th to the 10th year; and from 0.75 to 1.0 gramme ($11\frac{1}{2}$ to $15\frac{1}{2}$ grains) from the 11th to 15th year. This treatment most rapidly brings to an end or cuts short the process.

In confirmation of the observations of Germain Sée, I may here remark, parenthetically, that in the case of a 16-year-old lad, who suffered from an extremely severe and obstinate neuralgic headache, a single dose of 1 gramme ($15\frac{1}{2}$ grains) of antipyrin on three successive days proved entirely curative after large doses of quinine and salicylate of sodium had been tried in vain. Although the author has hitherto given a decided preference to antipyrin as a febrifuge, he acknowledges, likewise, the powerful effect of the substance introduced by Cahn and Hepp under the name of acetanilid or

antifebrin. While this remedy generally diminishes the temperature in cases of typhoid fever, erysipelas, and articular rheumatism attended with high fever, without exerting any special influence upon the course of the disease, it appears to me that in the high temperature of pulmonary tuberculosis the effect of antifebrin exceeds that of the other antipyretics. It is often able to banish fever for two or three days. I give antifebrin from one to three times a day in the following doses: to children of 2 to 4 years of age, 0.05 to 0.075 gramme ($\frac{3}{4}$ to 1 grain; 5 to 11 years of age, 0.1 to 0.2 gramme ($1\frac{1}{2}$ to 3 grains); 12 to 15 years of age, 0.2 to 0.3 gramme (3 to $4\frac{1}{2}$ grains). One advantage which antifebrin possesses over antipyrin is that it is less apt to give rise to a rash.—*Wiener Med. Blätter*, Jan. 1, 1891.

TREATMENT OF THE DIARRHŒA OF PHTHISIS.

—Polyak reports the results which he obtained in the treatment of the diarrhœa of phthisis with the silicate of magnesia under the form of talc, as proposed by Debove, and with lactic acid, recommended by Sézary and Aune. About 250 grammes (8 ounces) were administered in a pint of milk. As a rule, the diarrhœa ceased in a few days, but re-appeared as soon as the talc was discontinued. The patients preferred milk containing talc to plain milk, but, nevertheless, it was impossible to continue the use of talc more than six or seven days because it excited a sense of oppression in the epigastrium. The author does not believe that intestinal ulcers can be healed by the prolonged use of talc. More favorable results were obtained from lactic acid. He began with 1.80 grammes ($27\frac{3}{4}$ grains) in 120 grammes (about 4 ounces) of milk. The doses were increased on successive days until 4.50 grammes ($69\frac{1}{2}$ grains) were being taken daily. The diarrhœa and pain generally ceased after the third day and by another day or two the stools had become normal. It was found well to continue the remedy in smaller doses for some time after the diarrhœa had disappeared. Lactic acid was well borne by the patients. Unpleasant secondary phenomena were never observed unless the treatment had been needlessly prolonged. Dr. Polyak thinks we may be able to cure intestinal ulcers by means of lactic acid.—*La Gazette Médicale de Montréal*, January, 1891.

A SIMPLE AND EASY METHOD OF EXTRACTING NASAL POLYPI.—In cases where, for whatsoever reason (as in children or when obstruction of the nasal cavity will not allow the introduction of an instrument), the extraction of nasal polypi is impossible by the usual method. Dr. E. Kurz, of Florence, recommends the following procedure, which he has employed with entire success in two cases: After having anesthetized the nasal mucous membrane by cocaine, he introduces a Bellocq's canula and attaches to its spring, when it enters the mouth, a stout thread of waxed silk, with which are connected, at a certain distance apart, three sponges of increasing size. The first should be large enough, in passing the posterior naris, to rub slightly against its margins. The thread is then drawn forward so that the first sponge sweeps the nasal chamber. The polypi are thus detached and brought away with the sponge. The remaining sponges are intended to repeat the same manoeuvre in case the first fails to accomplish its object, or to tampon the posterior naris, should ablation of the polypi provoke smart hæmorrhage. In Dr. Kurz's 2 cases the first sponge sufficed to detach the growth, and the bleeding was so trifling that a tampon was not needed. The operator merely cut the thread and withdrew the two sponges through the mouth. The writer suggests that the same process might be utilized for the extraction of foreign bodies from the nose when access proved difficult.—*La Gazette Médicale de Montréal*, January, 1891.

AN EFFICIENT METHOD OF REMOVING FOREIGN BODIES FROM THE NOSE.—Dr. S. Johnson Taylor (*Lancet*, November 8, 1890) describes the following method of removing foreign bodies from the nose, which was successful in the case of a child of 3 years with a large bead in the nostril. The procedure is simply Politzer's method of inflation through the unobstructed nostril.

The nozzle of the Politzer bag is introduced into the nostril which does not contain the foreign body, and if the patient is old enough he is requested to swallow a mouthful of water. During the act of swallowing the bag is vigorously compressed, the escape of air from around the nozzle being prevented by grasping the nose with the thumb and forefinger. At the moment of compressing the bag the foreign

body will probably be blown out. In the case of a young infant the compression should be made while the child is crying.—*St. Louis Clinique*, January, 1891.

A NEW treatment for prolapse of the rectum, introduced by Dr. S. D. Powell, and but little known, consists in rolling and strapping the buttocks with two strips of adhesive plaster, extending sufficiently forward to secure a good hold. The child (or adult) defecates with these in position, is thoroughly cleansed after the act, and new strips applied. This method, which in the hands of the inventor has never failed, is based on the fact that thereby the relaxed sphincter is elevated and supported during the strains put upon it while the child is at play, and protected from the lateral traction occurring in the squatting position assumed in defecation. It and the parts above gradually regain their contractile power and ultimately become competent to fulfill their function normally.—*Medical Record; St. Louis Clinique*, January, 1891.

FIRST TRIENNIAL REPORT OF THE DEPARTMENT FOR SKIN DISEASES AND SYPHILIS OF THE MUNICIPAL HOSPITAL OF ELBERFELD.—By resolution of the city authorities on May 1, 1887, this department was created and placed in charge of Dr. Eichhoff, whose contributions to medical literature are so widely and favorably known. Beginning with 13 patients, selected from the medical and surgical wards, the number under treatment has steadily increased. The department contains about eighty beds, divided into a first, second, and third class. The department also has the care of sick prostitutes under the police regulations. We find in the *Deutsche Medicinische Wochenschrift* for November 27, 1890, a report by Dr. Eichhoff of three years' work in his department. The number of cases treated was about a third larger in the second than in the first year, and in the third about a half larger than in the second, and nearly double that of the first.

Leaving scabies out of the question altogether, many more dermatological than venereal cases were under treatment, and of the former class the infectious mycoses constituted a large proportion, especially favus, tinea tonsurans, parasitic sycosis, parasitic eczema (the seborrhœic eczema of Unna), and impetigo con-

tagiosa. Psoriasis was comparatively rare, and fewer cases were seen each year. Simple sycosis was much less frequent than parasitic sycosis. Among venereal disorders relatively few chancroids were seen in comparison with constitutional syphilis. Four per cent. of the syphilitic cases originated in extra-genital infection. Gonorrhœal rheumatism was comparatively common. In favus and tinea tonsurans Eichhoff's treatment consisted in first shaving the scalp, which was then cleansed with soft-soap or some medicated soap (tar, sulphur, salicylic acid, or salol). A parasiticide ointment was then applied and the head covered with a bandage of starched gauze. When dry, such a bandage-cap can be taken off and replaced, and may be used for weeks. The ointments were composed of various parasiticide agents, as corrosive sublimate, tar, sulphur, salicylic acid, chrysarobin, pyrogalllic acid, iodine, etc., either alone or variously combined. The most rapid cure was obtained by means of a salve containing the yellow iodide of mercury in combination with pure iodine in the proportion of 0.2 to 2.0 : 100. The single observed case of favus of the nails was of special interest, because, in addition to and upon the basis of the favus ulcers of the nails, a general progressive scleroderma was developed, and gradually involved the entire surface of the body. This scleroderma, however, retroceded as soon as the original affection was cured by means of pyrogalllic acid.

Parasitic sycosis was more amenable to treatment, which consisted in shaving, washing thrice daily with a resorcin,—salicylic acid or sulphur,—salicylic-acid soap, and then covering the surface with a salve or alcoholic tincture of salicylic acid, ichthyol, and resorcin in various proportions and degrees of concentration. Other remedies were also used, and sometimes entire dependence was placed upon the medicated soaps. The treatment of parasitic eczema (Unna's seborrhœic eczema) was similar to that of psoriasis vulgaris, and was based upon the use of baths, soaps, and parasitocides in the form of soaps, ointments, or lotions, according to special indications. The feeblest germicides were capable of curing impetigo contagiosa. Often simple washing with soap sufficed; in other instances creolin, resorcin, or salol was incorporated in a soap.

Scrofuloderma, tuberculosis cutis, and, above all, lupus, were treated by aristol with the happiest results. In the first two lesions flabby edges were cut away with scissors, unhealthy granulations and warty outgrowths destroyed by the sharp spoon or hot iron, and aristol in powder, or made into a 10-per-cent. salve, applied to the surface. Non-ulcerated lupous nodules were converted into ulcers by the sharp spoon, thermo-cautery, or some escharotic (pyrogalllic acid, chloride of zinc, etc.), and aristol then applied in the manner above specified; for aristol exerts no influence unless it comes into contact with granulating tissue. Other methods are not excluded, and, indeed, that described is but a deviation from the so-called mechanico-chemical, which the reporter thus applies to lupus erythematosus also: first the Pacquelin cautery, then pyrogalllic acid in the form of an ointment or a 10-per-cent. alcoholic solution, and, finally, a cicatrizing substance, as iodoform or aristol.

The therapy of psoriasis was anticipated in describing that of parasitic eczema. The most rapid effects were obtained by ointments of chrysarobin and pyrogalllic acid, though these have unpleasant consequences, from which hydroxylamine is partly, and aristol altogether, free. The last two may, therefore, be preferred, though less speedy in action. The after-treatment of psoriasis is important, and should consist of warm water and vapor baths and the use of medicated soaps, by which last only can the remains of a psoriasis be thoroughly removed from the cutaneous glands. Leg-ulcers were sprinkled with aristol-powder, covered with a layer of cotton, and the limb firmly bound. Several days' rest was then enjoined. In one case of ozæna insufflation of aristol-powder proved superior to all other remedies. Syphilis was principally treated by means of mercurial inunctions and fumigations, upon which the reporter places more reliance than upon injections or any other method. He alternates internal medication with inunctions. For the ulcers of tertiary syphilis aristol is an excellent dressing.

SIR MORELL MACKENZIE objects to large hospitals on the ground that the added virulence of germs from the bodies of many patients is as dangerous as that of those emanating from dead bodies.

THERAPEUTIC NOTES.

Dr. J. B. Mattison, in a recently-published article upon the subject of "The Treatment of the Morphine Disease," says: "In all cases drugs should be dropped as soon as possible, and sleep secured by a walk or other exercise,—an electric *séance*, a Turkish or half-hour's warm bath, a light meal, a glass or two of hot milk, one or more of these before retiring. Patients whose slumbers end early often note a peculiar depression on waking, and, if so, hot milk, cocoa, coffee, beef-tea, or bovine should be at command."—*Dietetic Gazette*, Jan., 1891.

MIXTURE FOR NEURALGIC HEADACHE.

The late Dr. George M. Beard devised a mixture which he employed successfully in headaches of all kinds, and which has lately received the indorsement of Dr. E. P. Hurd in his monograph on neuralgia. The prescription is as follows:—

R Caffeinæ citratis,
Ammonii carb., ... ʒj.
Elixir. guaranæ, ... fʒj.

M. Sig.: A tablespoonful every hour till the pain is relieved.

The continuous use of the drug does not seem to produce any harm.—*St. Louis Med. and Surg. Journal*; *Dietetic Gazette*, Jan., 1891.

EXCESSIVE MENSTRUATION.

R Ergot. dialysat., ... 3x.
Glycerin., ... 3v.
Acid. salicylic., ... gr. xxx.
Aquæ destillat., ... fʒiiss.

M. Sig.: Inject into the rectum once a day a teaspoonful of this mixture, diluted with 3 teaspoonfuls of water.—*Four. Amer. Med. Asso.*, Jan. 31, 1891.

BRONCHIAL ASTHMA.

R Ammonii iodid., ... ʒij.
Extr. grindeliæ robust. fl., ... fʒss.
Extract. glycyrrhizæ fluid., ... fʒiv.
Tinct. lobeliæ,
Tinct. belladonnæ, ... ʒij.
Syrup. tolu., ... q. s. ad fʒiv.

M. Sig.: A teaspoonful t. d. Extra dose to be given during a paroxysm.—*Amer. Journ. of Med. Sciences*; *Four. Amer. Med. Asso.*, Jan. 31, 1891.

NEURALGIA.

This pill has cured a number of stubborn cases of neuralgia, after various other remedies

had been used with only palliative effect. In migraine, facial neuralgia, or neuralgia growing out of chronic catarrh, sciatica, etc. Brown-Séquard's and Gross's formulæ for neuralgia are nowhere in comparison with this prescription:—

R Iodidi arsenici, ... gr. j.
Ext. belladonna,
Valerianate morph., ... ʒj.
Pulv. ext. gentian., ... gr. v.
Fl. ext. aconite-root, ... gtt. v.

Make pil. mass, and in 60 pills.
Sig.: 1 to 3 in twenty-four hours.

This makes a very nice little pill, which will commend itself to physicians upon acquaintance. The combination is such that there is no trouble whatever from nausea or irritation of the stomach following its use.—*The Prescription*, Jan., 1891.

CHLORAL-HYDRATE MIXTURE.

The following is an excellent formula for the administration of chloral hydrate:—

R Chloral. hydrat., ... gr. xx.
Syr. acac., ... ss.
Syr. chocolate, ... ʒj.
Elix. lactopeptine, ... ʒss.

M. Sig.: Dessertspoonful every two hours.—*I. N. LOVE*, in *The Prescription*, Jan., 1891.

SALICYLIC ACID AS A PROPHYLACTIC OF SCARLET FEVER.

In an October number of the *Centralblatt für klinische Medicin*, Dr. G. Sticker reports the observations of Dr. G. de Rosa, as published in the *Giornale internazionale delle scienze mediche*, as to the value of salicylic acid as a preventive of scarlet fever. Of the 66 children exposed to the infection,—27 cases existing in one house,—only 3 took the disease after the administration of the drug, and in those the failure was attributed to the fact that its administration had begun too long after exposure. Its use is to be begun when there is danger of infection, giving from 0.1 to 0.3 gramme (1.5 to 4.5 grains) daily, until the possibility of infection is past. It is not necessary to isolate the patients, for fear of their communicating the disease, under this régime.—*N. Y. Med. Journal*; *Cincinnati Lancet-Clinic*, Jan. 24, 1891.

ACUTE URETHRITIS.

Dr. J. William White (*Medical News*) recommends the following mixture in capsules:—

℞ Salol, ... gr. iiii.
 Oleoresin cubebs, . . . gr. v.
 Balsam copaiba (Para), . gr. x.
 Pepsin, ... gr. j.—M.

The discharge in two-thirds of the cases ceased within a week. In the majority of cases he also recommended an injection of gr. ii-x of sulphocarbolate of zinc in a 10- to 15-per-cent. solution of peroxide of hydrogen.—*The Prescription*, Jan., 1891.

COUGH MIXTURE.

℞ Syr. tolutani,
 Syr. pruni virg.,
 Tr. hyoscyami,
 Sp. ætheris comp.,
 Aquæ, ... āā part. æquales.

M. Dose, a teaspoonful.—JANEWAY, *Med. World*; *The Prescription*, Jan., 1891.

FOR EPILEPSY.

The following formula I have used with much satisfaction to myself and benefit to my patients who have epilepsy:—

℞ Ferri hydrocyan, . . . 3j.
 Quininæ valerianatis, . . gr. x.
 Zinci cyanuret., . . . gr. x.
 Ext. hyoscyam., . . . 3ss.

M. ft. massa et in pil no. lx div.

Sig.: 2 pills night and morning.—COWDEN, *Med. Summary*; *The Prescription*, Jan., 1891.

AN INJECTION AGAINST LEUCORRHOEA AND BLENNORRHOEA IN WOMEN.

℞ Creolin, ... gtt. xxx.
 Ext. fluid. hydr. Canad., . f3iiss.

Sig.: Two teaspoonfuls in a pint of warm water to be used at one injection.

As a urethral injection the following formula is used:—

℞ Ext. fluid. hydrast. Canad., . gtt. xxx.
 Creolin, ... gtt. x.
 Aquæ, ... i3vij.

Sig.: Use pure as a urethral injection — *Four. de Méd. de Paris*; *The Prescription*, Jan., 1891.

BRONCHITIS.

In bronchitis with profuse muco-purulent expectoration:—

℞ Terebene, ... 3iiss.
 Mucil. acacia,
 Aquæ, ... āā 3ss.
 Syr. zingiberi, . q. s. ad 3ij.

M. Sig.: 3j t. i. d.—*The Prescription*, Jan., 1891.

PILOCARPINE IN DRYNESS OF THE TONGUE.

Extreme dryness of the tongue is, under any circumstances, a very distressing symptom,

and one which does not readily yield to treatment whilst the concomitant cause remains in operation. The sucking of ice or sipping of bland fluids gives but temporary and inadequate relief, and the same may be said of glycerin employed as a paint. In this condition I have successfully used pilocarpine, $\frac{1}{20}$ grain or $\frac{1}{10}$ grain, in the form of a gelatin lamel, allowed to dissolve on the tongue, previously moistened with a sip of water. I find this small dose quickly establishes a moderate flow of saliva, which persists for at least twenty-four hours, and is unaccompanied by excessive perspiration. The altered state of the mouth is often described by the patient as being delightful. I send this with the hope that others may share the satisfaction I have experienced, if they have not already done so, in this use of pilocarpine. It is scarcely necessary to add that we must exercise due caution in the use of so potent a remedy.—J. G. BLACKMAN, M.D., *Brit. Med. Journal*; *Buffalo Med. and Surg. Jour.*, Jan., 1891.

TREATMENT OF SMALL POX BY SULPHUR.

Dr. Iscar gives sulphur in such cases, and claims much success. He thinks that it is eliminated by the skin, which accounts for its good effects. He gives the following formula for children:—

℞ Sulphur (sublimated and washed),
 10 grms.
 Glycerin,
 Orange-flower water, . āā 60 grms.
 Syrup (simple), . . . 30 grms.

M. Sig.: Give a teaspoonful every hour.—*Archives of Pediatrics*, Jan., 1891.

GALACTORRHOEA.

Braun (L'Union Médicale) recommends in excessive secretion of milk the application of a compressing bandage to the breasts, low diet, interdiction of beer, derivation to the intestine by means of a saline purgative. In case these measures may prove ineffective the following mixture may be given:—

℞ Iodide of potassium, . . . 2
 Syrup of raspberry, . . . 20
 Distilled water, . . . 200

Sig.: A tablespoonful three times daily.—*Four. Amer. Med. Asso.*, Jan. 10, 1891.

TREATMENT OF OVARIAN CYST WITH THE INDUCED CURRENT.

Noeggerath (Centralblatt für Gynäkologie, September, 1890) gives an account of 6

cases in which absorption of ovarian growths was produced by the application of the faradic current.

The basis of this treatment is expressed in the following sentences: The current employed has the character of quantity; that is, the induced power is strong, as is generally found in the best apparatus. The negative pole of the secondary current is introduced into the vagina, mounted on an insulated handle, and covered with a wet sponge; while the positive pole is connected with a large plate electrode, covered with moist sponge, and placed over the abdomen. The current should only be strong enough to be perceived by the patient. Each *séance* should last from one-half to one hour, and be repeated about three times each week.

In 1 case presenting adhesions the current was broken at intervals of one second, in the hope of obtaining more energetic action, and in this way to reach the larger growths. Treatment should be continued from six to eight weeks. The most favorable cases are those presenting mono- or multi-locular cysts (myxadenoma) of medium size. In this class of cases the results are much more radical than in the use of the constant current in fibromata, as the tumors disappear completely. Of course, it has no effect upon malignant growths.—*American Practitioner and News*, January 3, 1891.

GUNPOWDER STAINS OF THE FACE.

Gunpowder stains of the face may be removed by painting with biniodide of ammonium, distilled water, equal parts; then with dilute hydrochloric acid, to reach the tissues more deeply affected.—*Revue de Thérapeutique; Medical Age*, December, 1890.

CASTOR-OIL.

Castor-oil is a drug which has not yet been, and is not likely to be, altogether supplanted by its more modern rivals, says the British Medical Journal; nevertheless, it has been found that patients often decline to take it, and choose some more palatable, but less efficient, substitute. The best way of taking castor-oil is thoroughly to mix the dose with about four times as much hot milk; this is most effectually accomplished by shaking the two together in a bottle which they do not more than half fill. When taken as above directed, the activity of the oil appears to be

increased, and, being rendered very limpid by the hot milk, its oily nature is not perceived. Children take it very readily in this form, in which, indeed, it is scarcely distinguishable from rich milk.—*American Practitioner and News*, January 3, 1891.

MASSAGE IN CHRONIC ULCERS.

In Aden one has to treat numbers of ulcers of feet and legs, some quite incurable, probably dependent mainly for their origin on the want of vegetables and animal food, though few of them are actually scorbutic. The following case illustrates the extremely varied nature of the means that have to be adopted. A patient slightly scorbutic had an ulcer 2 inches long and 1½ inches broad on the dorsum of his foot. The signs of scurvy soon cleared up, but in spite of the most varied dressings, elevation, poultices, and free, deep incisions, after two or three months' treatment, the ulcer remained of much the same size. There was a broad, dense margin of cicatricial tissue, and outside this the remaining skin of the dorsum was smooth, pigmented, and immovable on the underlying structures. Then we started massage for half an hour twice daily, with simple dressings. The patient was made to knead and rub the surrounding skin, so as to soften and loosen it. The ulcer at once began to improve, at first rapidly, and afterward more slowly; and now, in little over a month, it has quite healed, though the skin is still pigmented and rather glossy and bound down. This seems such a common sense mode of proceeding as to be scarcely worth mentioning; yet it is one that is very apt to be overlooked, and shows the need of departure from the regular routine practice. In very large ulcers of the leg which have partly healed, and so become surrounded by a more or less dense and extensive superficial cicatrix, this manipulation has been of much benefit, softening the tissues and improving the defective blood-supply.—MR. H. HERBERT, *British Medical Journal; American Practitioner and News*, January 3, 1891.

PEREIRENE.

Quinine, when employed in intermittent fever, has a bad effect when the patient presents symptoms of cardiac weakness. But when added to pereirene this objection is done away with, and the combination often manifests advantages.

We prescribe :—

R.—Sulphate of quinine,
Pereirene, . . . āā 7 grains.

We obtain an effect equal to that which is produced by the administration of 15 grains of sulphate of quinine, but without any modification of the circulation.—*Times and Register*, January, 24, 1891.

A SIMPLE CURE FOR NOCTURNAL ENURESIS.

According to Dr. Van Trenton, La Hayne, in a paper before the International Congress, nocturnal enuresis of children is due to the insufficiency of the sphincter vesicæ, which allows the urine to flow into the upper portion of the urethra, from which it is then expelled by the reflex action of the detrusor urinæ. It cannot be due to distension of the bladder, because children wet the bed two hours after retiring. His treatment consists in preventing the urine from running into the urethra by raising the foot of the bed. He has made fourteen cures in this way, taking the additional precaution of having them empty the bladder just before retiring, and of giving them no liquid at this time.—*Practice; Indiana Medical Journal*, January, 1891.

THE EFFECT OF SALOL UPON THE KIDNEYS.

When Sahli, in 1886, introduced salol to the notice of the profession, he believed that he could describe it as free from deleterious influence, and that it could be employed in large doses without producing any ill effects. The opinions of succeeding observers were divided. Georgi perceived no injurious consequences follow its use, and, in particular, never knew it to cause albuminuria. Jaksch, also, considered it a harmless drug, which might be given even in renal affections without apprehension. On the other hand, Hertlich and Josefowitsch each witnessed a case of pronounced carbolic-acid poisoning as the result of large doses of salol. Kobert, likewise, uttered a warning against its too fearless employment, since by its means toxic amounts of phenol might enter the system. Although Sahli remained unconvinced by Kobert's objections, yet his arguments were based entirely upon theoretical considerations, and rested upon no basis of facts. A recently-observed fatal case reported by Hesselbach (Practitioner, August, 1890) may well inspire caution in the use of salol. A 15-grain (0.9 gramme) powder of this substance had been ordered to

be taken every two hours by a maid, 22 years of age, who was suffering from acute rheumatism. But the mother, instead of one powder, administered two at each dose, so that in about eight hours the girl had taken more than 7 grammes (2 drachms). Before taking the last powders the girl already fell into a collapse, lost consciousness, spoke at random, and finally became comatose, and died four days after ingestion of the drug. Upon post-mortem examination there was found a chronic nephritis with acute exacerbation, apparently produced by the salol. This case led Hesselbach to study systematically the effects of the individual components, as well as those of salol itself, upon the kidneys. His experiments led to the conclusion, above all, that the use of carbolic acid in any form, even in that of salol, is distinctly contra-indicated when kidney disease is present. He also ascertained that the renal disturbances in salol intoxication are due to the phenol, and that symptoms of salicylic-acid poisoning only appear after massive doses have been administered. These studies lead to the belief that the large proportion of carbolic acid which it contains render salol a toxic drug, the unlimited therapeutical employment of which is attended with danger, and that salol is contra-indicated in acute and chronic diseases of the kidneys.—*Wiener Medizinische Blätter*, December 25, 1890.

CARBOLIZED OIL IN SCABIES.

The Army-Surgeon (Der. Militärarzt) of Vienna recommends friction with carbolized oil (1 part carbolic acid to 15 parts olive-oil) in scabies. In an unusually severe case, in which sulphur ointment had been employed in vain for four days, the affection, which involved the whole body, entirely disappeared after two days' application of carbolized oil. The remedy at once relieves the itching and is especially valuable in cases attended by considerable dermatitis, which is aggravated by sulphur ointment.—*Deutsche Med. Zeitung*, January 8, 1891.

TREATMENT OF SCABIES WITH CREOLIN.

According to the Internationale Klinische Rundschau for November 16, 1890, Dr. De Lollis employed creolin, in the form of a 5-per-cent. vaseline ointment, in cases of scabies, rubbing it once daily into the affected parts. He claims that, as a rule, only four such appli-

cations are necessary to produce perfect cure. Creolin, in the author's opinion, is preferable to any other remedy for this purpose, especially possessing the advantage over sulphur in not producing any eczema of the skin, and not staining either the skin or the linen.—*Therap. Gazette*, January 15, 1891.

FORMULA FOR A GUAIAIC GARGLE.

To not a few practitioners who have passed their meridian, guaiacum is esteemed only a little less than a specific for "sore throat,"—tonsillitis especially. The following is a combination for a gargle that has been very useful:—

℞ Ammoniated tinct. guaiac, 4 drachms.
Compound tinct. cinchona, 4 drachms.
Chlorate of potash, . . . 1 drachm.
Strained honey, . . . 4 drachms.
Powdered acacia, . . . q. s.
Water, . . . 2½ ounces.

M. Sig.: To be used as a gargle, and a teaspoonful may be swallowed every second hour.—*Pharmaceutical Record*, January 5, 1891.

CHILBLAINS.

Professor Morrow is credited with this apparently excellent formula for chilblains:—

℞ Acidi carbolic, . . . 3j.
Tincturæ iod., . . . f 3ij.
Acidi tannici, . . . 3j.
Cerat. simplicis, . . . 3iv.

Misce bene et ft. ungt.

Sig.: Apply two or three times a day.—*Weekly Medical Review*, January 3, 1891.

MENSTRUAL COLIC.

Dr. J. C. Da Costa prescribed the following in a case of menstrual colic:—

℞ Chloroform. (pur.),
Spir. camphoræ, . . . āā f 3ss.
Spir. æther. nitrosi,
Spir. æther. comp., . . . āā f 3iss.

M. Sig.: f 3ss-j in 3j of water, containing 3j of spirit. frumenti, every half-hour for three doses.

INJECTION BROU.

The L'Union Méd. gives the following formula for injection brou:—

℞ Opium, ... 0.5.
Catechu, pulv., . . . 0.2.
Croc, ... 1.0.
Aq. fervid., . . . 200.0.

Infuse, filter, and add plumbi acet., 1.5; zinci sulph., 3.0.—*Pharm. Record*, January 19, 1891.

CONDENSED MILK FOR MAKING EMULSIONS.

According to the *Pharm. Post*, condensed milk is excellently adapted for making emul-

sions of any kind. A 50-per-cent. codliver-oil emulsion is thus made with it:—

℞ Oil, ... 8.0.
Condensed milk, . . . 3.0.
Glycerin or syrup, . . . 3.0.
Water, ... 2.0.

The milk is rubbed in a mortar, the oil added gradually, and lastly the glycerin and water. To make it more palatable, 10 drops of oil of bitter almond and 15 drops of oil of wintergreen may be added.—*Pharm. Record*, January 19, 1891.

APPLICATION FOR THE RAPID DISSOLUTION OF THE FALSE DIPHTHERITIC MEMBRANES (CALDEVELL):—

℞ Papoid, ... 10 parts.
Hydronaphthol, . . . 3 grains.
Hydrochloric acid, . . . 15 drops.
Distilled water, . . . 120 parts.
Glycerin, ... 12 parts.

M. Sig.: To be used in atomizer every half-hour.—*Times and Register*, January 24, 1891.

EXHIBITION OF BROMOFORM.

Dr. Chas. W. Earle: "I want to occupy two or three minutes of the time of the society in the consideration of a very unpopular procedure,—that is, the administration of medicine,—and introduce to your notice bromoform, the latest remedy for whooping cough. About six weeks ago my attention was called to this drug by an article in a German paper, and about that time an article was also published in the *Medical Record* by Dr. Fischer, reporting some 16 cases to which he had administered it with marked benefit. By this time I had procured the medicine, and have now had experience with it in 6 cases. In 5 cases there has been marked improvement, although it was not a fair trial, because they had passed pretty well along into the second stage, and had commenced to recover. In some of these cases there were thirty paroxysms a day, previous to administering the drug, and in four days the paroxysms had been reduced to ten. It has rather a sharp, pungent odor, and is best administered in syrup of acacia. I usually combine it with a little paregoric. The dose for a child 2 years of age is 2 drops; a child 4 years old, 4 or 5 drops. Usually, the administration of from 20 to 60 drops in five or six days lessens the number of paroxysms. It is best given after meals; and the children to whom I have administered it have made no objection to taking it. It is recommended by several of the leading practitioners in Vienna, and I bring it

before the society because we are having considerable whooping cough, and I think it would be well to give it a trial.—*Jour. Am. Med. Asso.*, January 24, 1891.

COCOANUT OIL FOR TAPE WORM.

Dr. Parisi, of Athens, Greece, has communicated to the French medical papers his experience with cocoanut-oil as a tape-worm remedy. As he was traveling in Abyssinia, one day, after eating and drinking the pulp and milk of several cocoanuts, he felt quite sick. Soon he had a passage, and was astonished to notice he had expelled a complete tape-worm, head and all, quite dead. On his return to Athens he repeated the experiment on a number of patients, and was successful in all cases, the tænia always coming out entire and dead. The treatment he has adopted as most convenient is as follows: The patient, while fasting, is to take in the morning the milk and pulp of one cocoanut. No cathartic is needed, and no particular care necessary. This simple remedy is as efficient as pomegranate-root or male fern, and, for several reasons, preferable to them.—Paris letter in *Therap. Gazette*, January 15, 1891.

NITRO-GLYCERIN IN MORPHINE POISONING.

Dr. Speer reports the following case: A youth, aged 17, took, with suicidal intent, 6 grains (0.40 gramme) of sulphate of morphine at 8 P.M. He was not noticed until 10 P.M., when it was found he could not be roused. Medical aid was at once summoned; as it was presumed that all the poison had been absorbed, the stomach-pump was not used; $\frac{1}{30}$ grain (0.002 gramme) of atropine was injected every two hours until $\frac{1}{8}$ grain (0.01 gramme) had been used; strong coffee was injected *per rectum* at short intervals, and the battery vigorously applied. At 8 A.M. the following morning Dr. Speer saw the patient in consultation with Dr. Stimson, and found him almost completely cyanosed,—pulse 160, respirations 40, temperature 101° F. (38.3° C), loud mucous râles in trachea, pupils widely dilated, respiration abdominal; $\frac{1}{80}$ grain (0.0013 gramme) of nitro-glycerin was injected hypodermatically, and in an hour a similar quantity. The patient was then turned on his side, when very soon there was a long, full, thoracic inspiration; in about half an hour he vomited freely and became conscious. He was then given another injection of half the quantity, and went to sleep,

waking up in two hours all right, with the exception of headache.—*New York Medical Journal*, November 15, 1890, p. 545; *The Satellite*, January, 1891.

A NEW CURE FOR SPASM OF THE GLOTTIS.

Spasm of the glottis is notoriously a very alarming condition, and one which it is often difficult to relieve, as the symptoms are urgent. Sir Morell Mackenzie gives a good "tip," and one worth remembering. The spasm is the result of a reflex, the starting-point of which varies in different cases; and he has found, as a result of experience, that a pinch of snuff, judiciously sniffed up the nostrils, will, by causing another and violent reflex, cause the former to subside.—*Med. Record; Weekly Med. Review*, January 10, 1891.

ANTISEPTIC TREATMENT OF TONSILLITIS.

R. Borate or benzoate of soda, ʒiiss.
Hot water, . . . ʒvij.
Dissolve and add
Tincture of myrrh, . . gr. lxxv.
Blackberry syrup, . . ʒj.
M. et ft. gargle.

Or the following:—

R. Resorcin, . . . gr. xv.
Distilled water, . . fʒvij.
Blackberry syrup, . . fʒj.
M. et ft. gargle.

Then brush over the tonsils, several times a day, with the following:—

R. Glycerin, . . . ʒv.
Camphor, . . . gr. xv.
Carbolic acid, . . . gr. xv.
M. Sig.: Use as above, with a camel-hair brush.—*Southern Med. Record*, January, 1891.

RHUS AROMATICA IN ENURESIS.

W. M. Powell reports 16 cases, and says that in all he excludes phymosis or an adherent prepuce as the cause. It is well to commence with minute doses, gradually increasing a drop or two each day so as to prevent any gastric disturbance. Much stress should be laid upon diet and general regimen. The quantity of drink should be restricted. Very little meat should be allowed, owing to the effect it has of acidifying the urine. The child should have plenty of fresh air and exercise, and should be given every morning a cool, or even cold, sponge-bath, with a tablespoonful of sea-salt added. The body should then be briskly rubbed with a moderately-

coarse bath towel, especially in the region of the spine.—*Annals of Gyn. and Pæd.; Med. Age*, Dec. 26, 1890.

CHRONIC CONSTIPATION.

According to the Medical Press and Circular for November 12, 1890, at the meeting of the Berlin Medical Society, Herr Flatau introduced a new method of treating cases of chronic constipation due to torpor of the colon. This consists in applying about 3 grammes of boric acid. In those cases in which the lower edge of the rectum protrudes through the anus, and when this remains visible after powerful contractions of the levator ani and sphincters, the quantity of boric acid mentioned is either to be dusted or rubbed on the mucous membrane in sight. In cases in which the mucous membrane is not visible it must be insufflated. It is important that the medical attendant should carry out the procedure himself; at any rate, at the commencement. The patient should then keep quiet for a time. In from an hour to three hours peristaltic action will be observed in the colon. He has never seen a failure from this method of treatment, nor had he seen a case where the patient got so accustomed to it that it ceased to be effective. On the contrary, if carried out systematically daily, permanent improvement in time takes place, and normal peristalsis is returned to. He had tried a number of other substances, but none had the same useful effect.—*Therap. Gazette*, Jan 15, 1891.

DIFFICULTY TO URINATE AFTER CONFINEMENT.

I do not claim any originality for the following, but it has aided me and satisfactorily relieved many of my cases during the past sixteen years:—

R̄ Tinct. cantharidis, . . . 3ij.
Tinct. nucis vomicæ, . . . 3v.

M. Sig.: Eight drops every four hours in 1 ounce of cold infusion of parsley-root.—*DR. J. H. D., Boston, Mass., in Med. Summary*, Jan., 1891.

EXCISION OF THE SPINAL ACCESSORY NERVE FOR SPASMODIC TORTICOLLIS.

Mr. Southam reports 3 cases of spasmodic torticollis successfully treated by excision of a portion of the spinal accessory nerve. In 2 of the patients intervals of eighteen and six months had elapsed since the operation, and there was no indication of a tendency to a

recurrence of the spasm.—*The Provincial Medical Journal*, December 1, 1890, p. 765; *The Satellite*, Jan., 1891.

SUBSTANCES WHICH ARE ABLE TO DISSOLVE URIC ACID.

Dr. Posner has investigated this subject. He used, as a basis for his observations, uric acid and the uric-acid calculi passed by patients after they had taken certain medicaments.

He found that the ingestion of alkaline waters gives to the urine dissolving properties as regards uric acid, and also that the solvent properties of alkaline waters are directly proportional to the amount of bicarbonate of soda which they contain.

The spring-water of Vals possesses in this respect the greatest efficacy. It dissolves 10 centigrammes of uric acid for 100 grammes of urine, while distilled water, under similar conditions, dissolves only 4 centigrammes. This water contains a large percentage of carbonates of soda and other alkalies. Bicarbonate of soda, in doses of 4 to 5 grammes a day, gives almost the same results; but it is impossible to use this drug for so long a time as the mineral-water.

Bicarbonate of lithia, citrate of potassium, and borocitrate of magnesia have actions analogous to bicarbonate of sodium. Last in the order of usefulness comes borax.—*Arch. Hydrology; Le Bulletin Méd.; Weekly Med. Rev.*, Dec. 27, 1890.

CETRARIN.

Kobert has recently contested the statement that cetrarin, the active principle of Iceland-moss, produces an increase in the blood-pressure, while, further, his experiments on a large number of animals have shown that this remedy increases the peristaltic movements of the intestines, and is, therefore, of value in the treatment of chronic constipation. It further is stated to increase the number of the red and the white blood-corpuscles, especially when they have been reduced below normal in various chronic diseases, while, finally, it is a mild stimulant to the central nervous system. It would appear from these facts that the employment of cetrarin is indicated in chlorotic individuals in whom there is loss of appetite and constipation, the dose being 1½ grains.—*Wiener Medizinische Blätter*, December 11, 1890; *Therap. Gazette*, Jan. 15, 1891.

THE Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
F. A. DAVIS, Publisher.
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SOME RECENT STUDIES OF URINE IN HEALTH AND DIS- EASE.

THE development of organic chemistry has rendered possible a more thorough and exact knowledge of the normal constitution of the urine and the quantitative and qualitative changes which that fluid undergoes, in consequence of disturbed metabolism of tissue. The researches which are continually being prosecuted in chemical and biological laboratories have materially enlarged our comprehension of various disease-processes. Abstracts of investigations, collected from various sources, in the *Deutsche Medizinal-Zeitung* for November 10, 1891, are of such interest and importance that we take pleasure in summarizing their results in this issue.

The influence of water-drinking upon the excretion of uric acid has been studied anew by Schöndorff, of Bonn, who examined his own urine by the exact method of Fokker, as modified by Salkowski. The statement had been made by Genth that the free ingestion of water caused a diminution or even a total disappearance of uric acid. Schöndorff, however, was unable to determine that the imbibition of water exerted any influence upon the quantity of uric acid eliminated. He found, on the contrary, that the variations in the amount of uric acid after drinking freely of water were entirely within physiological limits.

Much has been written of late upon the subject of the presence of lactic acid in urine under normal and pathological conditions. According to Nencki, the only convincing observations are those of Schulzen and Riess, who detected lactic acid in the urine of acute yellow atrophy of the liver, and of Wiebel, who found it in the urine of trichinosis. Heuss, of Berne, after laborious examinations, has failed to find lactic

acid, and concludes that it should not be regarded as a constituent of normal urine.

Another bone of contention has been the occurrence of digestive ferments in the urine. Bruner, of Warsaw, dissents from the views of Sahli, Gehring, Hoffmann, and other writers, and criticises their methods, pointing out that they had neglected to exclude the possible presence of hemialbumose, which responds to the biuret reaction. Bruner, after a preliminary testing for the latter substance, followed a method modified from that of Wittich. His conclusions are as follow: Trypsin is never found in the normal urine or fæces, being, in all probability, destroyed in the lower bowel. It only makes its appearance in cases of catarrhal jaundice, or when the duct of Wirsung is occluded in consequence of catarrhal swelling. In the latter case, the pancreatic juice is, like the bile, absorbed into the blood and removed by the kidneys. Ligation of the pancreatic ducts in dogs was likewise found to be followed by the appearance of trypsin in the urine.

Pepsin is never absent from normal urine, and is especially abundant in that passed in the morning. On the contrary, it is never present when the stomach is the seat of cancer. This observation was confirmed by numerous autopsies, although the writer is unable to explain the fact, since, as is well known, cancerous stomachs are abundantly able to produce pepsin. It is suggested by the reporter (v. M.) of our exchange that, in normal conditions, pepsin is absorbed by the stomach, but that if it escape into the bowel it is, like trypsin, constantly destroyed. In cancer, the absorptive power of the stomach is considerably diminished,—the pepsin passes into the intestine, where it undergoes transformation. The reporter adds, moreover, that Bruner's experiments should be carefully repeated and examined, for it is possible that under the circumstances other urinary constituents may give the biuret reaction, while other possible sources of fallacy are to be found in the method employed. Should the author's conclusions in regard to pepsin be fully confirmed they will possess decided diagnostic importance, which is more and more denied to the presence or absence of free hydrochloric acid in the gastric juice as a sign of the existence of gastric carcinoma.

Drs. Carl Bohland and Heinrich Schurz, of Bonn, in 3 cases of leukæmia, have estimated the quantity of uric acid and the total amount of nitrogen eliminated. They found, as Sal-kowski had previously done, an absolute increase in the quantity of uric acid. The proportion of the nitrogen removed in the uric acid to the sum-total of nitrogen excreted, which, normally, according to Pott, is as 1:19.72 to 1:21.01, was notably altered. In 2 cases it stood as 1:9.45 and 1:12.77; whereas, in the third case, in which fever was present and the increased elimination of nitrogen exceeded the production of uric acid, the proportion was as 1:24.4. That in the first 2 cases the variation did not depend upon a reduction of the nitrogenous output through diminished transformation of albumen was proven by the estimate of the total amount of nitrogen excreted.

The transformation of albumen in cirrhosis is the subject of a recent communication by A. S. Fawitsky. Frerichs had ascertained that after destruction of hepatic tissue no complete oxidation of albumen to its final product—urea—took place, but halted at a lower step with the formation of léucin, tyrosin, etc. Numerous observers testified to the diminished excretion of urea in cirrhosis and other chronic affections of the liver. The experimental observations of the authors quoted seem, however, to point to different conclusions. The difference of opinion can be partially explained by the fact that clinicians have not sufficiently recognized the dependence of the reduced production of urea upon the reduced consumption of alimentary material. The urea excreted in severe diseases of the liver, in which the functions of that organ are greatly depressed, does not sink as long as the patient receives sufficient nourishment. This statement agrees with the opinion of most physiologists that urea exists not only in the liver, but in all the organs. As a result of their researches, the authors state that in cirrhosis of the liver the transformation of albumen approaches that which takes place in healthy individuals upon a mixed diet. The assimilation of nitrogen from the food is quite complete, and ranges, upon an average, from 84 to 94 per cent. of the amount ingested. The variations in the urea and uric acid vary greatly, and depend more upon the general

state of nutrition than upon the condition of the liver. The amount of urea in the extractives is nearly the same as in health. The acidity of the urine is slightly increased in hepatic cirrhosis. There is also an augmented excretion of ammonia. It appears to the authors that the ammonia, as well as the urea, is formed by all the organs, and not only by the liver.

THE PARASITIC ORIGIN OF CANCER.

THIS was the theme of a discourse by the brilliant Cuban *chef de-Clinique*, Dr. Albarran, of Paris, delivered October 14, 1890, before the Clinical Society of Havana, and reported in our esteemed exchange, the *Revista de Ciencias Medicas*, for October 29, 1890. None is better entitled than Dr. Albarran to speak of the pathogenesis of cancer,—a subject to which he has given the closest study. Various more or less promising efforts have been made during the past few years to ascertain the source of primary irritation, from which began the development of an atypical, malignant, epithelial neoplasm. Analogy suggested the thought that cancer, like tuberculosis, is a disease of infectious character and depends upon the growth and activity of micro-organisms.

Carcinoma, remarks Dr. Albarran, presents the principal characteristics which distinguish infection: primary localization in a determinate situation, followed by generalization in other parts of the organism. There is, however, this difference. In ordinary infectious disorders the causative micro-organism is transported from its primary seat to remote organs and each tissue reacts in a special manner. In malignant disease it seems that it is not the micro-organism itself which enters the circulation, but pieces of tissue detached from the morbid growth. The generalization of cancer depends upon an epithelial embolus; but what, pertinently asked the speaker, prevents us from believing that the micro-organism is not conveyed along with the cell upon which it had impressed an excessive developmental potency?

The history of the investigations into the origin of cancer recalls that of the inquiries regarding the nature of tuberculosis. Although

our knowledge of cancer is much less complete, many important facts are on record in reference to its contagion, inoculability, and agent of infection. It is of doubtful service to quote old cases, but, among moderns, curious examples are cited by Budd of the transmissibility of cancer from one to another patient. Dr. Albarran has collected 12 cases of cancer of the penis contracted by husbands from wives who suffered with epithelioma of the uterus. To these he adds a case observed by himself, in which a medullary cancer of the upper jaw was succeeded by a soft cancer of the œsophagus. This is the only known case of encephaloid of œsophagus, and the fact, taken into consideration with the presence of the same variety of cancer in the mouth, makes it seem very probable that the secondary tumor was due to direct inoculation by shreds of morbid tissue detached from the primary growth and swallowed. Cornil has known cancer of the stomach consecutive to epithelioma of the lip.

Next, as to the inoculability of cancer. Until lately no positive results were obtained from experimental researches into this subject. Alibert in vain attempted to inoculate himself and his pupils. Langenbeck and Follin apparently met with more success, but their methods were defective and their results doubtful. Allusion was next made by the speaker to the report of Hanau, of Zurich, who succeeded in inoculating two rats with cancer, as was demonstrated by microscopical section. Hanau's communication has already been noticed editorially in these columns.*

The modern attempts to identify a micro-organism of cancer began with Rappin, of Nantes, who, however, was deceived by the germs of a secondary infection. A little later, Scheurlen, of Berlin, thought that he had discovered a cancer-bacillus. Before long, however, it was demonstrated that Scheurlen's bacillus was a common organism. Then followed the erratic and useless work of Domingo Freire.

In this uncertainty the subject rested until Albarran, in April, 1889, after the publication of Darier upon vegetating follicular psorospermiosis, described, before the Biological Society

of Paris, 2 cases of epithelioma of the jaw, in which numerous psorosperms were found. Balbiani divides the protozoa into five classes, of which only the second, the coccidia or psorosperms, are of importance as related to cancer. These organisms appear in the form of roundish or elongated cells, consisting of granular protoplasm and containing one or several well-developed nuclei. These parasites dwell in epithelial tissue, in the interior of epithelial cells, the nuclei of which they crowd to the periphery. They develop by forming primary cysts, the interior of which become filled with spores, until finally the cysts rupture, the spores escape and originate anew the roundish and granular coccidia. Albarran had, in 1885, observed these bodies in a cancer of the jaw, had shown his preparations to Malassez and Balbiani, by whom they were recognized as psorosperms. The discovery was unpublished, but when Darier, in 1889, was studying vegetating psorospermiosis, he also met with these roundish bodies, and consulted Malassez, who perceived them to be identical with those found by Albarran in cancer. Malassez and Albarran assert that in many cases of epithelioma, cellular forms, which appear to be coccidia, are met with, particularly in the centre of the epithelial nests. Psorosperms are described by Darier as present in Paget's disease of the nipple. Cornil has seen psorosperms in a cancer of the womb; Thoma, of Dorpat, in a cancer of the breast, not dependent upon Paget's disease; and Wickham in an epithelioma of the nose. At the Tenth International Congress, Albarran read a paper upon a hitherto unknown affection, which he termed vesical psorospermiosis, and which consists in a proliferation of the epithelium of the bladder. The connective tissue of the viscus is invaded, and the mucous membrane is thrown up in the form of papillary excrescences. In the epithelial cylinders were found psorosperms in their two principal forms of roundish cells and spore-containing cysts. Two epitheliomata of the bladder, in which protozoa were found, were also described upon the same occasion.

That these bodies have not been more frequently encountered is owing to the fact that it is difficult to bring them out distinctly by

* Medical Bulletin, July, 1889, p. 226.

staining. They may usually, however, be identified under a power of 400 by 500 diameters. Sometimes the membrane of the cyst may be seen with its double contour, while between it and the retracted protoplasm a clear space exists. At times, again, smaller cysts are perceived, containing a great number of spores in the form of lengthened corpuscles.

In view of the facts summarily narrated, the analogies between vegetating psorospermiosis of the skin, vesical psorospermiosis, Paget's disease, and cancer, and the presence of the same organisms in all these conditions, Albarán believes himself justified in asserting that, at least in some cases, psorosperms appear to be the cause of cancerous infection.

CORRESPONDENCE.

To the Editor of the Medical Bulletin:—

On the morning of December 4, 1889, my entire family, consisting of eight white and four colored, were made sick by eating buckwheat-cakes containing white arsenic (Rough on Rats). We were all very much nauseated at first, and then vomited. The amount of arsenic was quite large. The State chemist, who analyzed a teacupful of the batter, told me that there was enough of the arsenic in that to have killed fifty people. The large amount, together with the prompt treatment, I think, saved us.

The treatment consisted in taking mustard in warm water, and then the free use of warm water; afterward a dose of castor-oil. In some cases stimulants were needed, and in my own case a hypodermatic injection of morphine, then light diet for a few days. We were all extremely nervous for several days after. Had no pain or cramps. I have had some cough ever since. I think that I contracted cold at the time, and then I had two attacks of "grip" in January, which may account for the cough, though I think not, for, in my opinion, the cough is a stomach cough.

JOHN Gerdine, M.D.

ATHENS, GA., September 24, 1890.

Mr. Editor:—

Since my last report on the treatment of diphtheria, I have treated upward of 50 cases, of which all except 5 recovered. One died from epistaxis and the others from heart-failure, not being able to react properly after the throat was cured. These were cases which had assumed a malignant form, and were very bad when I first saw them. I was always able to control the de-

velopment of the disease in three days when I saw the patients from the first manifestation of symptoms. Many of the cases seen were of a malignant character, as many as 3 dying out of one family in our city. My treatment is almost entirely local, with the bichloride of mercury, tincture of iron, and chlorate of potash. I make the solution strong with the bichloride, perhaps 1 or 2 grains to the ounce. My patients always recover in about ten days, without any of the *sequelæ* of the disease. I keep the membrane from forming as much as possible. I generally make three daily visits, and swab the throat myself. The *foetor* will leave in three days, and the fever in about twenty-four hours, I care not how malignant the symptoms. If one trusts to the parent to swab the throat he will be disappointed in the local treatment, for it will not be thoroughly executed. There are cases which must be treated constitutionally, but in my estimation they are but few, if the bichloride is properly applied and strong enough. Before I used it I had all the *sequelæ* of the disease to treat for months after my patient was well of the diphtheria. Now, when the throat is well my patient is well, with no dropsy or paralysis. Brothers in the profession, give this method a fair trial, and you will never regret it.

E. E. GOODMAN.

ALTOONA, PA., January 24, 1891.

Mr. Editor:—

It is much to be regretted that there is at the present time a wide difference of opinion as to the best treatment of diphtheria. The multitude of new remedies and modes of treatment recommended, both in home and foreign journals, indicates a very unsettled state of medical opinion and practice. I may premise that I have now practiced medicine forty-four years. I wish to state very briefly the results of my experience in the treatment of diphtheria during the last thirteen years. I have followed, for that length of time without deviation, a method of treatment which has proved quite satisfactory; I have treated during that time at least 300 cases, and probably more. My losses have been between 1 and 2 per cent. All my losses were those of diphtheritic croup in very young children, where the disease manifested itself first in the pharynx. My treatment is this: I first brush the throat, using a camel-hair brush, with the following mixture:—

℞ Acidi carbolici, ... 3j.
Glycerini, ... 3ij.—M.

I generally wipe the diphtheritic patch once a day, sometimes twice, morning and evening, if the case is obstinate.

In addition, I give the following mixture internally:—

R. Potassii chloratis, ... 3j.
 Tinct. ferri chloridi, ... 3j.
 Syrupi simplicis, ... 3ij.

M. Sig.: A teaspoonful every three hours to a child 3 or 4 years old.

In addition, I use a gargle of solution of chlorate of potash, $\frac{1}{2}$ drachm to a tumblerful of water, every hour or two, in every case where the patient is able to do so. The diet should be light and nourishing. Strict attention should be paid to cleanliness and all hygienic precautions.

M. G. WHITNEY, M.D.

PLYMOUTH, December 21, 1890.

MEDICAL NEWS AND MISCELLANY.

DR. SAMUEL WOLFE'S Philadelphia address is 1624 Diamond Street.

THE third Dutch Congress of Physical and Medical Sciences will be held at Utrecht on April 3 and 4, 1891.

EX-SENATOR MCKNIGHT, an old Philadelphia student and practitioner, of Brookville, was in Philadelphia last month.

DR. S. GUTTMANN, editor of the Deutsche medicinische Wochenschrift, has had the title of "Geheimsanitätsrath" conferred upon him.

THE genial Wathen, of Louisville, lately gratified his many friends here by a flying visit to Philadelphia. The only trouble was, his stay was all too short.

DEATHS FROM SOOTHING-SYRUP.—Six deaths from the use of soothing-syrups have recently been reported by Dr. A. G. Belleau to the Quebec Board of Health.—*Weekly Med. Rev.*

LEON LE FORT, Professor of Clinical Surgery and Member of the Academy of Medicine, may be addressed at 96 Rue de la Victoire, Paris. Hour of consultation, 1 P.M. on Monday, Wednesday, and Friday.

A DOCTOR DIES SUDDENLY.—On January 14th, while making a professional visit to a house on Bridge Street, Dr. Gamble, a well-known physician of Altoona, became suddenly ill and died in a few moments. The Coroner's jury rendered a verdict of death from cerebral hæmorrhage.

EIGHT patients are being treated in the Post-Graduate Hospital by Koch's lymph. Three of them are cases of lupus, 4 are cases of phthisis pulmonaris, and 1 of laryngeal tuberculosis. The inoculations are in charge of Dr. W. C. Bailey, who was for a long time a student in Koch's laboratory, assisted by the Director of the laboratory, Dr. J. H. Linsley.

DR. BENJAMIN LEE, Secretary of the State Board of Health of Pennsylvania, has accepted the position of Secretary of the Section on State

Medicine of the American Medical Association. As the meeting takes place in Washington, May 5th, it is important that all papers intended for this section should be in his hands by April 5th. All members of the association desiring to be enrolled in the section are requested to forward him their names at 1532 Pine Street, Philadelphia.

THE TEN COMMANDMENTS OF ABDOMINAL SURGERY.—1. The arrest of hæmorrhage. 2. The avoidance of mechanical irritation. 3. The guarding against infection. 4. The proper apposition of the edges of the wound. 5. The provision of necessary drainage. 6. To apply gentle pressure to prevent exudation. 7. To give perfect physiological rest. 8. To secure the best possible position of the parts to promote comfort and healing. 9. To provide for hygienic surroundings. 10. To attend to the patient's general health.—DR. GRIFFITHS, in *Four. Amer. Med. Asso.*

"ANNIE ROONEY" AS AN EMETIC.—The Pittsburgh Medical Review notes the curious case of a woman who was much troubled with vomiting during the early stages of pregnancy, and who was at the same time regaled with frequent renditions of "Annie Rooney" by a musical neighbor. In some way she came to associate the song and the nausea together, and at this time, the end of the eighth month, she vomits only when she hears the song. While attending entertainments during last summer she was obliged to leave if "Annie Rooney" was on the list.

THE STATE BOARD OF HEALTH AND VITAL STATISTICS OF THE COMMONWEALTH OF PENNSYLVANIA.—The Fifth State Sanitary Convention of Pennsylvania will be held at Altoona, Friday and Saturday, May 15 and 16, 1891, under the auspices of the State Board of Health, assisted by the Board of Health of Altoona and a committee of citizens. This is not in any sense a doctors' convention. All who take an intelligent interest in the promotion of sanitary reform and the protection of the public health are invited not only to be present and take part in the discussions, but to forward to the Secretary, Dr. Benj. Lee, 1532 Pine Street, Philadelphia, for consideration by the Committee of the Board, not later than April 15th, papers on sanitary or hygienic subjects which they would like to present before the convention.

SEXUAL LIFE OF WOMEN AFTER CASTRATION.—At the Berlin Medical Congress, Dr. F. Deppler, of Venice, read a paper embodying the results of a study he had made in the cases of ovariectomy performed by himself. He had performed castration 46 times, obtaining a cure in 39. These operations were performed for the relief of purulent or gonorrhœal salpingitis,

oöphoritis, fibroid tumors of the uterus, etc. The following were his conclusions, derived from a study of the physiological consequences of these operations: 1. When the operation was performed on account of salpingitis or other inflammatory process, uterine hæmorrhage never occurred subsequently. 2. The conjugata became gradually shortened, and this was the more marked the younger the individual was when operated upon. 3. The uterus became atrophied, the vagina grew shorter and narrower, its mucous membrane became paler, and the labia majora were somewhat thinned. 4. The breasts grew smaller, acquiring a strong resemblance to the male mammæ. 5. The brown pigmentation of the nipple, areola, perineum, and anus disappeared wholly, as did also pathological pigmentation existing in some of the cases; the hair also turned white. 6. The tendency to *embonpoint*, which is generally believed to exist after these operations, was not observed by the author. 7. No changes were observed as regards the growth of the hair or the tone of the voice. 8. The sexual desire remained, and was the more pronounced the earlier in life the operation was performed. 9. The operation offers no impediment to marriage; 3 of the author's cases had married and lived happily with their husbands for years. 10. A marriage with a castrated woman is the ideal Malthusian marriage, and the only way the Malthusian idea can be carried out without endangering the health and happiness of the woman. 11. In the cases operated upon in early life for inflammatory conditions, no neuroses were seen to develop, which was not the case when women were operated upon late in life for fibroid tumors of the uterus. 12. A favorable influence upon the hæmorrhage was observed after operation for myoma, yet in no case did the menopause at once set in. 13. In cases of operation for uterine fibroma, the patients, even those in full maturity, lost all sexual inclination after the operation.—*Medical Press and Circular; Medical Age.*

ELIGIBLE VEHICLES FOR QUININE.—Doubtless every pharmacist and physician has his favorite method for disguising the taste of unpalatable drugs, but not every one is aware that the enterprise of manufacturing pharmacists now offers such a variety of vehicles from which to choose.

Some rely almost exclusively on pills and capsules, whereby the drug is smuggled into the stomach without recognition by the gustatory nerves. But there are patients whose apparatus for deglutition is so constructed as to render it almost impossible for them to swallow pills or capsules, as well as cases where it is all-important to secure immediate absorption of the medicine.

When given in pill form, no matter how soluble the mass, an appreciable time must elapse before the remedy begins to have its effect.

How, then, can we administer quinine in solution or suspension—particularly to children or delicate ladies—without causing a disturbance in the family every time a dose has to be given? To children quinine may often be given advantageously by inunction, and the oleate of quinine especially, applied to the surface in this way, is readily absorbed and produces promptly the characteristic effect of the drug. Suppositories must not be forgotten in cases where the stomach is particularly irritable, and the hypodermatic injection presents itself as a *dernier ressort* when a prompt and powerful influence is required. But in ordinary cases quinine may be administered by the mouth.

One plan is to mix the quinine with some alkali or astringent, so that the bitter sulphate or muriate becomes converted into the tasteless alkaloid or tannate.

Another plan is to combine with the quinine a mixture having a bitterness of its own, which shall blend with and modify the intolerable bitterness of the quinine, some aromatic being generally added to still further disguise the objectionable taste.

It is on this principle that *cascara cordial* operates, and many of those who have tried this vehicle declare that is the best that has yet been offered. The especial advantage which it possesses over all others is the fact that it is a laxative agent, and so renders more efficient the action of the antiperiodic.

Licorice has been long known as having a remarkable power of covering the taste of bitter medicines. This property is due to a peculiar principle called glycyrrhizin, a glucoside, insoluble in water and in acid solutions, but readily dissolved by the aid of alkalies.

Where quinine is given in powders it may be rendered nearly tasteless by simply rubbing it up with a small quantity (one-fourth its weight) of ammoniated glycyrrhizin (ammonium glycyrrhizate).

"Fluid-extract licorice, for quinine mixtures," is one of the most efficient of all the preparations employed for covering the bitter taste of quinine. The best way to use it is to drop a dose of the powder into a little of the fluid extract contained in a spoon, mix it thoroughly, and swallow it at once.

Aromatic elixir of licorice is to be used in the same way as the fluid extract, but is especially useful in the drug-store when a single dose of quinine is called for to be taken at once.

Yerba santa contains a principle analogous to glycyrrhizin, which renders quinine in its presence as tasteless as starch. It appears to act like glycyrrhizin by producing a peculiar impres-

sion upon the gustatory nerves; it does not, as stated by some, produce with the quinine an insoluble compound. Unless the mouth is thoroughly rinsed after taking the mixture, a bitter taste will gradually develop as the nerves recover from the influence of the yerba santa.

To some persons the taste of yerba santa itself is disagreeable, and when this is the case licorice is to be preferred. Barring, however, idiosyncrasy in this respect, we can recommend the preparations of yerba santa as the best means of rendering quinine tasteless. Aromatic syrup of yerba santa renders it possible to give little children full doses of quinine without the vigorous remonstrances which physicians and parents have learned to regard as inevitable.—*Northwestern Pharmacist*.

THE RATIONALE OF INFLUENZA.—The following remarks by Dr. Laffont, Professeur de Thérapeutique à la Faculté de Médecine de Lille, will be read with interest: The epidemic which was such a cruel scourge last winter is again appearing, although, up to the present, in a milder form. It may, therefore, not be without use to consider at the present moment the most rational treatment of this affection, at all times painful, and sometimes, from its complications, serious. This malady is, I consider, a contagious catarrhal affection, in its milder form known to us as "grippe," but from its recent serious epidemic character christened "influenza," a name it will probably retain henceforth. The symptoms of this complaint are manifested invariably by a functional depression, more or less marked, of the whole system, varying from simple lassitude, stuffiness of the nose, and slight gastric obstruction, all premonitory symptoms of a large number of contagious diseases, and fortunately often constituting the only symptoms of the malady, which in some cases passes for ordinary "grippe."

In the late epidemic, to these premonitory symptoms succeeded all the characteristics of grave typhoid infection: nausea, fever, muscular pains, delirium, pneumonia, with a tendency to suffocation and complete prostration. In the discussion at societies and in medical journals on its etiology, some described it as a simple catarrhal affection, more or less grave, having for cause the influence of the external conditions of the atmosphere, and denied its contagious character; others sought at once for the microbe. In the midst of these etiological discussions no therapeutic law was propounded, and the medical journals were advocating here aperient medicine, anthelmintics; there, the Vin Mariani (made from the coca of Peru) and tonic medicines; elsewhere, counter-irritation and balsamics were said to do wonders; almost everywhere was admitted the specific effect of sulphate of quinine, or, still better, salts of quinine,—above all, antipyrin. From my own experience, based upon a

great number of cases, and on myself in particular, I have no hesitation to assert that the method which succeeded the best was essentially eclectic. Thus, at its first manifestation, I was able to arrest the development of the disease by administering an aperient (oleum ricini by preference), then causing thoracic revulsion by rubefaction, or even vesication, and by provoking simultaneously a non-depressing diaphoresis, easily obtained by administering several times in the day a grog made from Vin Mariani, one-third wine and two-thirds water, very hot with sugar, such as has been prescribed by the learned laryngologist, Fauvel, for hoarseness and loss of voice, "*à frigore*."

In the presence of influenza in the stage when the patient was completely depressed, very far from ordering antipyrin, which only augments the depression, I found it much more effectual to administer strong tonics, such as generous wines, champagne, whisky, rum, cognac; tonics, physical and moral, such as the preparations of Coca Mariani, Vin and Elixir, at the same time causing revulsion, and administering repeated aperients. From this treatment I rapidly cured myself, and observed the same results in patients without that long and tedious convalescence due, as I think, to the weakness caused by the use of antipyrin.

I advise, then, as a rational treatment for influenza and kindred affections, first, gentle purgatives; second, diaphoretics and revulsives; third, strong tonics.—*The Medical Press and Circular*, London, November, 19, 1890.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION was organized on January 22, 1891, at the Academy of Medicine, No. 17 West Forty-third street, New York, by the adoption of a Constitution and By-Laws and the election of the following officers: President, G. Betton Massey, M.D., Philadelphia; Vice-Presidents, William James Morton, M.D., and Augustin H. Goelet, M.D., New York; Secretary, William H. Walling, M.D., Philadelphia; Treasurer, Geo. H. Rohé, M.D., Baltimore. Executive Council: Horatio R. Bigelow, M.D., Philadelphia; Franklin H. Martin, M.D., Chicago; Wm. F. Hutchinson, M.D., Providence, R. I.; Frederic Peterson, M.D., New York, and Chauncey D. Palmer, M.D., Cincinnati, Ohio.

The object of the association, as stated in Article II of the Constitution, is: "The cultivation and promotion of knowledge in whatever relates to the application of electricity in medicine and surgery."

The association starts with a strong and vigorous membership, and has every prospect of a most useful and successful career. The next meeting will be held in Philadelphia, in September of this year.

WM. H. WALLING, M.D., Secretary,
2005 Arch St., Philadelphia, Pa.

PHILADELPHIA, January 15, 1891.

DR. SHOEMAKER, *Editor Medical Bulletin*.—

* Dear Sir: At the instance of the Board of Directors of the Mutual Aid Association of the Philadelphia County Medical Society, the following memorandum of the recent meeting of the Society, at which the claims of the Association were especially presented, has been made for the medical journals of Philadelphia. We venture to hope that you will be able to find room for it in your columns, and thus further this benevolent work.

Very respectfully,

(Signed) WILLIAM B. ATKINSON,

BENJAMIN LEE,

Committee.

Mutual Aid Association.—The recent meeting of the Philadelphia County Medical Society, at which the claims of and objects of the Mutual Aid Association were especially presented, was an occasion of unusual interest and awakened much enthusiasm. Addresses were made by Drs. Gouverneur M. Smith and Henry Tuck, of New York, the former and present incumbents of the Presidential Chair of the New York Society for the Relief of the Widows and Orphans of Medical Men, and by Professors Keen, Pepper, Willard, and others of this city. A brief memoir of Dr. Henry H. Smith, the founder of the association, was read by Dr. Benjamin Lee. Sixteen of those present followed the example of Professor Keen in enrolling themselves as members, or increasing the grade of their membership. The total addition to the benevolent fund thus made will amount to about \$1300. On the adjournment of the business meeting a reception was extended to the guests from a distance at the University Club.

The following extracts from Dr. Smith's address will convey an idea of the scope of the work of the New York Society:—

"Our society has, for a number of years, proved a blessing to its beneficiaries, and has been remarkably successful in accumulating a financial capital of \$172,180.58, which insures a continuance of a laudable work in the future." After emphasizing the somewhat remarkable fact that the largest contributors to and most earnest supporters of their society had been bachelors, and mentioning the names of the eminent physicians who, in the year 1842, met to inaugurate the movement, he continued: "Do not for a moment suppose that since then it has been fostered by lesser dignitaries. Many of those who have given to it the most time and care have been men whose families would, probably, in the ordinary course of events, never derive any pecuniary benefit from it. Since 1877, the smallest number of widows aided in any one year has been 10, and the largest number 14; the smallest number of orphans 4, and the

largest number 8. During the year the society meets once. The Board of Managers and the Standing Committee hold four stated meetings and such special meetings as may be necessary. One matter should be especially emphasized, viz.: A *charitable* element should prevail in the direction of such fraternities; while business principles should be strictly enforced in the investment of funds, a charitable disposition should be made of the revenue derived from such funds. The affluent members of the profession should deem it a duty to their holy calling to foster any such organization. It is a work in which all men of all nationalities and creeds can mutually co-operate, remembering the words of the great poet:—

"In Faith and Hope the world will disagree,
But all mankind's concern is Charity."

MOSQUERA'S FOOD PRODUCTS—BEEF MEAL, BEEF CACAO.—Parke, Davis & Co., whose reputation for original work has long been established, announce that after thorough study of the various food-products they can now supply preparations which will fulfill all the requirements for therapeutic and dietetic use.

Physicians, in their practice, very frequently meet with cases where nutrition is of more importance than medication; in fact, cases where nutrition is the only agent they can count upon. The question of replacing the waste of tissue, where normal nutrition is inefficient, by means of concentrated or predigested food, is one that always presents many difficulties, there being very few preparations, if any, that meet all the requirements of the medical profession.

Heretofore medical practitioners have had at their disposal a great variety of preparations of meat. These are divisible into four great classes. We have, in the first place, the extracts of meat, prepared after the formula of Liebig; then the so-called meat-juices; next, the ordinary powdered meats; and, finally, the meat-peptones.

The ordinary process of preparing meat extracts involves a simple extraction of meat with either warm or cold water, and an evaporation of the resulting solution continued until reduced to a thick liquid or paste. This extract contains the inorganic soluble salts of the meat and some stimulating organic matter, but none of the nourishing, flesh-forming albuminous substance.

The meat-juices are merely cold extractions of the meat, and such products contain some soluble albumen, which coagulates out upon boiling, and, naturally, cannot amount to much more than 4 or 5 per cent. The meat-juices, therefore, possess but little nutritive value.

Powdered meats, as heretofore known, are nothing more or less than the residue left after extracting all the soluble constituents. Dujardin-Beaumetz and several therapeutists, as a result

of a careful line of experiments, concluded that these powders possessed a high nutritive value, and could be employed to advantage in the treatment of certain diseases, consumption and dyspepsia especially. That they are concentrated nutrients is a fact, for beef, in its natural condition, contains 75 per cent. of moisture, all of which is driven off in the preparation of the powder. The fact, however, that these powders are liable to become rancid, or else have been deprived of the inorganic salts peculiar to meat in its natural state, which salts are quite essential in the digestive process, is an objection to the meat in this form. Moreover, powdered beef requires just as much effort on the part of the stomach to digest it as does ordinary beef, and for this reason cannot be regarded as a proper food for patients suffering with derangement or weakness of the digestive organs.

Another group of meat preparations embraces the meat-peptones.

Peptone is the ultimate product of digestion, and the form in which the albuminous or proteid matter is assimilated by the system. These peptones are invariably the product of the artificial digestion of meat by animal pepsin and hydrochloric acid, or, although to a smaller extent, by the digestive ferment of the carica papaya. These are the only preparations really valuable as nutrients. But the physician meets here with another difficulty, in many cases insurmountable; the taste of the peptones is more or less bitter and objectionable to the palate, so that patients either absolutely refuse to take them or take them only with the greatest repugnance. Besides this, their price is comparatively so high that frequently the physician is obliged to abstain from prescribing them.

All the difficulties heretofore encountered by the medical profession in the use of predigested foods have been overcome by the new food-products of the Mosquera-Fulia Food Company.

Mosquera's Beef Meal contains all the stimulating principles of the extracts of meat, and, in addition, the nutritive principles which the extracts lack; all the albumen of meat-juices without their weakness; all the strength of powdered meats without their rancidity and insolubility; all the peptone of the peptonized meats without their bitterness.

The claims we make on behalf of Mosquera's Beef Meal, therefore, cannot be overestimated: they are based on its analysis and properties, and may be condensed as follows:—

Mosquera's Beef Meal is a perfectly pure, predigested meat, containing all the nutritious constituents of good lean beef, half of which are in soluble form, ready for immediate assimilation, and the other half easily digestible by the gastric and pancreatic juices. Therefore, the entire preparation, being practically dry, is composed

of nutritive matter, containing about 40 per cent of soluble peptone and albumose.

It represents, in actual nutritive value, at least six times its weight of good lean beef.

It is perfectly palatable, and will be tolerated with ease by the most delicate stomach.

It admits of being administered in a variety of forms, thus avoiding monotony in the food.

It is the most nutritious, as well as the most economical concentrated food.

It must be understood that Mosquera's Beef Meal is not a ready-prepared dish, but rather a raw product. It is nothing more than a concentrated beef, converted by artificial digestion into a form which renders it assimilable upon mere contact with the mucous membranes of the alimentary canal. It, therefore, must be treated by the nurse or cook with the same regard to flavor and taste they would exhibit in the preparation of beefsteak. Ordinary beef, if simply boiled in water, would neither yield a palatable bouillon nor be eaten itself: salt and other condiments must be added to it. So, also, in the use of this beef-meal: ingenuity has necessarily to be exercised in its preparation. No matter how palatable or nutritious a food may be, unless presented in a variety of forms it will inevitably become monotonous and even repulsive, this being especially true with patients whose digestive organs are in a weak and debilitated condition. If, therefore, a patient is to take the beef-meal for a length of time, it must be administered in a variety of forms to insure the benefit of all its nutritious value.

It may be given in different soups, condimented to suit the taste of the patient, as also mixed with biscuit-powder or oatmeal-porridge and milk and sugar. Again, it may be mixed with chocolate, which makes a delicious beverage, or given in the form of a sandwich, and, finally, as a plain beef-tea, simply dissolving it in hot water, adding salt.

Mosquera's Beef Cacao consists of equal parts of beef-meal, sugar, and a superior article of Dutch cacao. It does not require cooking, but may be mixed with warm milk, exactly like ordinary chocolate, and so completely is the taste of the beef disguised that it cannot be detected. Requiring, therefore, no previous preparation, it is most conveniently administered.

To physicians interested, a pamphlet, fully descriptive of the special advantages, uses, and methods of administration of these preparations, will be mailed on request, and samples will be sent to physicians who desire to clinically test them in practice.

THE BRITISH PHARMACOPŒIA.—The Addendum to the British Pharmacopœia has just been issued, but has attracted but little attention, and has failed to obtain the support of the doctors in England. The Medical Press claims that four-

teen committees have been at work at it for over a year, and suggests that it might have been equally well done in a couple of days by two men and a boy—two practical pharmacologists and a chemist's assistant. In a critical review, dealing with the main features of the work, the Press says:—

"The history of the mode of preparation of the work—the exact machinery employed—is, after all, a matter of no very great importance. What we are chiefly concerned with is the result. If the work is good, and meets with the requirements of prescribers and dispensers, it will command the confidence of the profession, but if it fail in these respects it will soon sink into well-deserved oblivion. No attempt to bolster it up will be of the slightest avail, and it must stand on its own merits. The statement that the work is published 'by authority' is as much beside the question as is the fact that the cover is enriched with the Royal Coat of Arms. Let us, then, turn to the work itself, and see how far the demand for new remedies of tried and approved value has been complied with. In the first place we are glad to find that the *Hamamelis Virginica*, the American witch-hazel, has at last been made official. It appears in two forms—the bark and the leaves. From the bark is prepared the tincture, from the leaves the liquid extract, whilst in addition there is an ointment made by mixing the liquid extract with simple ointment. It should be noted that the extract, which is probably intended to replace or supersede 'Hazeline,' is made from the dried, and not from the fresh, bark. It is a 'one in one' preparation on the type of the American liquid extracts, and the dose is said to be from 2 to 5 minims. These *hamamelis* preparations will be largely employed for checking hæmorrhage, and in the treatment of varicose veins and bleeding piles. Another good introduction is the *hydrastis Canadensis*, or golden seal, which, for some years past, has been the favorite remedy for various hepatic disorders. The substance commonly known as *euonymin* has found official recognition under the title of dry extract of *euonymus*, and will probably command renewed attention as a means of increasing the secretion of the bile. The adoption of *picrotoxin* is to be commended, although we must confess that the definition is not very satisfactory. We are left in doubt as to whether the authorities—if they may be so called—regard it as an alkaloid, a glucoside, or simply a combination of active principles. The dose is given as from $\frac{1}{10}$ to $\frac{1}{30}$ grain, but there is no note of warning that it is a very active substance, and that the maximum dose, frequently repeated, is not unlikely to lead to the production of tetanus. Benzoate of sodium is so largely employed that its introduction will meet with very general approval. It is difficult to suppress a smile at finding that

nitrite of sodium is rendered official, and that the dose is given as from 2 to 5 grains. Only a few years ago it would have been considered almost a penal offense to have prescribed it. The glycerin suppositories so frequently recommended in the treatment of chronic constipation could hardly have escaped recognition. *Homatropine*, in the form of the hydrobromate, will prove a boon to the ophthalmic surgeons, whilst the 'huile de cade' will meet the requirements of the dermatologists. These are among the most useful of the introductions, and we have done our best to emphasize their importance. At a first glance at the addendum we were somewhat dismayed at failing to discover the names of certain familiar drugs, such as antipyrin, antifebrin, saccharin, lanolin, ichthyol, salol, and iodol, and we were still more disconcerted by finding certain other names, such as *phenazonum*, *adepts lanæ hydrosus*, and *glusidum*, with which we were obliged to confess our want of familiarity. We were somewhat relieved, however, by finding, on closer examination, that *phenazonum* was only our old friend antipyrin under another name, that the identity of saccharin has been skillfully masked under the term *glusidum*, and that *adepts lanæ hydrosus* was nothing more than the common or domestic lanolin. After all the talk about the iniquities of 'the advertising chemist' this is a distinctly comic move, and reflects credit on the ingenuity of the Medical Council. Salol and iodol we have, up to the present, been unable to identify, but we hope to discover them in due course. The authors of the addendum seem to have foreseen the difficulty which would be experienced by people of ordinary ability in remembering that antipyrin is now *phenazonum*, and have kindly introduced, as a synonym for their special benefit, the term *phenyldimethylpyrazolone*, a word which has the advantage of containing only twenty-four letters. We have no doubt that *phenyldimethylpyrazolone* will be largely prescribed, possibly in conjunction with *benzolsulphonicimide* and *diethylsulphondimethylmethane*. These drugs are likely to become popular as domestic remedies."

UNDER the title of "Symphonies in Tulle and Soirée Dansante," a pleasing entertainment was given at the Academy of Music, Philadelphia, on Friday evening, January 30, 1891, for the benefit of the building fund of the Medico-Chirurgical Hospital. A large and interested audience was ample testimony to the success of the undertaking. The first part of the programme consisted of a number of choice musical selections rendered by an orchestra of 150 young ladies. The latter part of the evening was given up to dancing.

The musical performers presented a picturesque spectacle, attired in gowns of every shade. But

the novelty of the performance lay in the character of the music and diversity of instruments employed. Piano, violins, bass-viol, drums, flutes, cymbals, bones, triangles, and many more, perhaps, were brought into requisition. Nor was the human voice lacking, solo, duet, and chorus lending an added charm to the melody of the instruments. The successful concert was due to the talent, skill, and energy of Mrs. Laura D. Wilt, who organized and conducted the orchestra.

The perfect harmony with which the tones of so many different instruments blended called to mind those beautiful lines from Spenser's "Faëry Queen":—

"Eftsoons they heard a most melodious sound
Of all that might delight a dainty ear;
Such as, at once, might not on living ground,
Save in this paradise be heard elsewhere:
Right hard it was for wight that did it hear,
To weet what manner music that might be,
For all that pleasing is to living ear
Was there concerted in one harmony,—
Birds, voices, instruments, winds, waters, all agree.

"The joyous birds, shrouded in cheerful shade
Their notes unto the voice attempted sweet,
Th' angelical, soft-trembling voices made
To th' instruments divine response meet;
The silver-sounding instruments did meet
With the base murmur of the water's fall;
The water's fall, with difference discreet,
Now soft, now loud unto the winds did call,
The gentle, warbling wind low answered to all."

OUR valued exchange, the St. Louis Clinique, comes to us with the new year in a new dress and under a new management. We congratulate our contemporary upon the tasty appearance of the title-page, its good paper and clear type, and the general excellence of its contents. The success of this journal in the past is a guarantee for that of the future, and the name of Dr. William Porter, the supervising editor, is in itself a tower of strength.

ANOTHER Southern friend, the Nashville Journal of Medicine and Surgery, comes to us in a new and improved dress. The editor, Dr. C. S. Briggs, very truly says that in appearance the Journal will compare very favorably with any of its contemporaries.

IS CANCER OF A POISONOUS NATURE?—Prof. Adamkiewicz, of Krakau, read a paper before the Royal Academy of Sciences at Vienna (*Deutsche Med. Zeit.*) on the above subject. After formulating the following questions, he reaches the conclusions given below in reply thereto:—

1. Is it, in the first place, possible to demonstrate any poisonous property of cancer-tissue, no matter how developed, upon the animal organism?

2. Is the activity of the cancer-poison upon the animal dependent on the location of the site of inoculation?

Experiments upon rabbits have so far furnished the following answers:—

1. There is a poison in recently-removed and unchanged carcinomatous tissue.

2. This poison can kill animals in a few hours.

3. It acts only on the nervous system, and death is caused by paralysis of the brain.

4. Boiling heat and disinfectants (carbolic acid, etc.) destroy the activity of this cancer-poison.

5. The micro-organisms which are constantly to be found in cancerous substance and at the site of inoculation do not, however, seem to be the carriers of this cancer-poison.

6. By transplanting cancer-tissue upon a favorable soil, the latter also acquires poisonous properties; it cannot be stated definitely to what extent the micro-organisms are concerned in the production of these properties, which develop on this soil at the same time.

7. No other living tissue, whether of physiological or pathological origin, possesses (as far as can be determined from his experiments) the poisonous properties of cancer.

8. This poison has been found only in true carcinomas; in sarcomas and adenomas he has not yet been able to prove the existence of such a poison.

9. The action of the poison is so rapid that it may be of value as a means of rendering evident the cancerous nature of a pathological growth.

10. Tissue from the cadaver possesses a poisonous action very analogous to that of carcinomatous substance; this analogy is so great that it may be positively stated that malignant growths produce during life a material having an action similar to that of the poisons from the cadaver.

Adamkiewicz intends to produce the proofs of these conclusions in a more extended form.—*Memphis Med. Monthly.*

ACUTE PURPURA.—Zanetti (*Atti e Rendiconti della Accademia Medico-Chirurgica di Perugia*) reports the case of a woman 23 years of age, who had had pains in the lumbar region and buttocks, associated with slight cephalalgia for some time. Of late these symptoms had become worse, and at the time he saw the patient intense pain had developed in the sacral region, attended by considerable prostration, elevation of temperature (38.4° C.), hæmatemesis, subconjunctival hæmorrhages; punctiform hæmorrhages on the arms, buttocks, and neck; lenticular hæmorrhages on the belly, genitals, and inner surface of the thighs. The cutaneous hæmorrhages extended rapidly, accompanied by hæmaturia and metrorrhagia, followed by death from syncope on the third day. The autopsy revealed extensive subperitoneal hæmorrhages with extravasation into the peritoneal cavity and ventri-

cles of the brain, intestinal hæmorrhage, spleen slightly enlarged and friable, beginning fatty degeneration of the liver.—*Fourn. Am. Med. Asso.*, January 10, 1891.

THE OVERWORKED PHYSICIAN'S LUNCHEON.—Dr. Allan McLean Hamilton contributes to the *Dietetic Gazette* some dietetic suggestions in nervous and mental diseases, one of which will interest all those busy practitioners who give themselves no time for a midday repast. His advice would be to lay in a goodly supply of fresh almonds, and to have some of them constantly within reach, and to eat freely of them during the spare moments. He writes as follows: "Acting upon a hint given me by my friend, Dr. Lauder Brunton, I have directed some of my patients to eat freely of fresh almonds, which are rich in oil and exceedingly nutritious, containing, as they do, 54 per cent. of fixed oil. According to Pavy, they contain 2.677 of nitrogen and 40 per cent. of carbon. It is a custom of Dr. Brunton and several other London physicians, when hurried and tired after their morning consulting hours, to make a luncheon simply of this kind. In cases of diabetes, when digestion is not too weak, it will be found that biscuits of almond flour are exceedingly nutritious and palatable, and may take the place of gluten bread.—*Journal Amer. Med. Asso.*

AN EARLY SIGN OF UTERINE CANCER.—In a paper published by Dr. Charles Audry, in the *Lyon Médicale* for November 23, 1890, it is claimed that in doubtful cases of uterine inflammation, especially when confined to the neck or cervical cavity of the uterus, and in which a diagnosis can ordinarily only be made as the result of microscopical examination of excised fragments, in every case in which fragments of tissue may be scratched off from the cervical cavity by the finger-nail, the epitheliomatous nature of the disease may be positively affirmed. In chronic metritis the tissues to the touch appear sometimes hard and sometimes soft, but in no case is it possible to scratch off fragments of the mucous coat by means of the finger-nail, with the single exception of cancer. Further, the author claims that there is no form of epithelioma in this cavity from which fragments may not be so removed. This process is evidently simple, and, if confirmed by others, will be of great value in clinical practice.—*Therapeutic Gazette*.

CYNOBEX HEBETIS.—Speaking of the barking cough of puberty, Sir Andrew Clark remarks that all the cases brought to him were overfed, and used alcohol. Improvement had almost always followed the enforcement of a liberal but simple dietary, in three or four meals a day; abstinence from alcohol; cold or tepid

sponging; warm, but not too warm clothing; active, out-door exercise, early hours, and general discipline. Locally, the glycerin of borax with oxychloride of bismuth and morphine, or the same with cocaine instead of morphine. These should be brushed over the whole interior of the throat after each meal and at bed-time. Internally, he recommends the syrup of bromide of quinine and iron with arsenic, or pills of reduced iron, zinc valerianate, belladonna, and nux.—*Lancet; Times and Register*.

RECENT SAVING OF LIFE IN MICHIGAN.—In a carefully-prepared paper, read before the Sanitary Convention at Vicksburg, the proceedings of which are published, Dr. Baker gave official statistics and evidence which he summarized as follows:—

"The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over 100 lives per year from small-pox, 400 lives per year saved from death by scarlet fever, and nearly 600 lives per year saved from death by diphtheria,—an aggregate of 1100 lives per year, or 3 lives per day saved from these three diseases! This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

COBRA VENOM NOT A CURE FOR CHOLERA.—The experiments that have been made in the hygienic laboratory of this service at New York, by Assistant Surgeon Kinyoun, on the effects of the cobra venom as a therapeutic agent in the treatment of cholera, have given the following results:—

1. Cobra venom is germicidal to the cholera spirillum in a $\frac{3}{4}$ per-cent. solution, but in no way affects the albumose of cholera.

2. It does not, in any strength, prevent the coagulation of the blood.

4. When the albumose of cholera and cobra venom are administered together, or the albumose followed by the cobra venom, the toxic effects of cholera are intensified.—*Abs. San. Reports; Memphis Med. Monthly*.

BIOGRAPHY OF ROBERT KOCH.—Dr. Koch, born forty-seven years ago at Clausthal in the Hartz Mountains, was educated and graduated at the University of Göttingen. Shortly after taking his degree he established himself in a village near Hanover and began to practice as a physician. Finding, however, that it was impossible to make both ends meet, he emigrated to Rackwitz, a little malarious town in Prussian Poland, which he subsequently deserted for

Wollstein. It was while there that his name came before the public, in 1880, as an expert in connection with the famous Speichert poisoning case. The conviction of the prisoner in this *cause célèbre* was entirely owing to the remarkable analyses and medical testimony of Dr. Koch, which attracted wide-spread attention by reason of their profound erudition. Later, he made some remarkably accurate studies in septicæmia. In 1882 he first made the great discovery that tuberculous diseases were due to the existence of bacilli. In 1883 his labors were interrupted by his being placed at the head of the medical commission dispatched by the German government to Egypt and India for the purpose of making researches into the origin and the causes and prevention of cholera. It was while at Calcutta that he succeeded in discovering the like germ of cholera. On his return to Germany he was rewarded by the government for his researches with an honorarium of 100,000 marks, with the rank of Privy Councillor, and with the Rectorship of the Imperial Institute of Hygiene. —*Medical Record; Medical Age.*

WHAT EXPERIENCE TEACHES ONE TO UNLEARN.—One of the most respected gynæcologists of this country, Prof. William Goodell, in the *Medical Record*; has recently stated that "every earnest worker in any field of the inexact sciences finds himself compelled to unlearn as well as to learn," and on this basis he communicates a sketch of a number of things, chiefly traditional teachings, which he has himself, in his own experience, learned to unlearn. His summary, of course, relates to the special branch of which he has been a distinguished teacher and practitioner; but many a general practitioner, if he were as honest and candid, could teach his professional brethren similar lessons. Among other things cited by him are the following:—

He has learned to unlearn the grandmotherly belief that the climacteric is in itself an entity, and that, as such, it is responsible for most of the ills of matronhood, and especially for that of menorrhagia.

He has learned to unlearn that antelexion and anteversion in themselves—that is to say, as displacements merely and without narrowing of the uterine canal—are necessarily pathological conditions of the womb.

He has long since abandoned the idea cherished by that class of waistless and witless nurses, now happily obsolescent, that the parturient woman is to be swathed like a mummy and to be kept as immovable.

He expresses his disbelief that mammary abscess comes from "caked" breasts, or from breasts overdistended from a secretion of milk too great for the infant's needs. Mammary

abscess, in the suckling woman, comes, in his opinion, from cracked nipples, and from cracked nipples alone.

He has wholly freed himself from the belief that cellulitis is at the bottom of most female ailments, and that the hot-water douche is its cure-all.

He has learned to unlearn the teaching that woman must not be subjected to a surgical operation during her monthly flux. Our forefathers, from time immemorial, have thought and taught that the presence of a menstruating woman would pollute solemn religious rites, would sour milk, spoil the fermentation in wine-vats, and much other mischief in a general way. Influenced by hoary tradition, modern physicians very generally postpone all operative treatment until the flow has ceased. But why this delay, if time is precious and it enters as an important factor in the case?

Long ago he came to the conclusion that the womb, like the nose, has its own secretions; and that, because the cervical canal is stopped up with mucus, it is not to be treated any more harshly than a stopped-up nose. This nasal analogy led him soon to think that even uterine catarrhs are not of such paramount importance as to merit heroic treatment, and that metritis and endometritis, in so far as symptoms are concerned, are often idle words.

He has learned to unlearn the idea—and this was the hardest task of all—that uterine symptoms are not always present in cases of uterine disease; or that, when present, they necessarily come from the uterine disease. Seemingly urgent uterine symptoms may be merely nerve-counterfeits of uterine disease. He has, therefore, long since given up the belief which, with many, amounts to a creed, that the womb is at the bottom of nearly every female ailment. As an outcome of much that he has learned to unlearn, Professor Goodell has arrived at this very short gynæcological creed: "I believe that the physician who recognizes the complexity of woman's nervous organization, and appreciates its tyranny, will touch her well-being at more points and with a keener perception of its wants, than the one who holds the opinion that woman is woman because she has a womb."—*College and Clinical Record.*

CALLED IN TIME.—*Citizen*: "Please tell the Coroner to come around to my house, quick."

Clerk: "What's happened?"

Citizen: "An electric-light wire is out of order and a lineman is going to climb up the pole to fix it."—*Good News.*

MELANO-SARCOMA OF THE BREAST IN AN INFANT.—On January 3d, M. M. called on me saying his son, 2½ years old, had an abscess on

the left breast, and wanted me to open it. On examination I found a hard mass about the size of an orange occupying the left mammary region. The history of the case is as follows: Soon after the birth of the child a small nodule about the size of a bean was noticed near the nipple. The physician consulted called it a ganglion, and told the parents it was of no account and would disappear soon without treatment. So it did when the child was about six months old, but re-appeared after six months and disappeared again. When the child was about 2 years old I was called to attend it for scarlet fever, but did not find anything of the growth. About three months later, as the parents state, it put in its appearance again and continued to grow for three months, when the father brought the child to me. I concluded, from the rapidity of the growth, the age of the patient, and the firm and hard appearance of the tumor, that it was a sarcoma. The axillary and subclavian glands were not involved. I removed the tumor and all the diseased integument, leaving a clean wound which healed up in two weeks. Microscopical examination revealed a melanotic sarcoma.

About one month after the operation I noticed an enlargement in the lower part of the scar and a swelling of the axillary glands on the left side, the glands on the right side being free. A week later there was also an enlargement in the upper part of the scar, and the two rapidly joined to form a mass about the size of the original tumor. Having read an article by Professor Esmarch as to the specific nature of some cases of sarcoma, I put the patient on specific treatment, although I could not find any history of specific trouble in the family. The treatment was of no avail, and the child, which had been very robust and healthy before, began to emaciate now and the tumor grew rapidly. About four months after the operation the tumor was involving the whole left chest from about 2 to 3 inches below the last ribs to above the left shoulder, displacing the left scapula toward the median line, and down the left arm to the elbow-joint, causing an enormous œdema of the arm and hand. There were also nodules scattered over the chest and back. The child died a perfect skeleton, and I intended to relieve the child of the tumor in order to preserve the growth for this Society, but the parents allowed no interference.

Melano-sarcoma usually originates from a chloasma or pigmented wart, but may also originate from skin where formerly no pigment was present. It was surprising to me that, after removal of the primary, comparatively small growth, the tumor recurred in multiplicity in such a short time. The glands not affected during the time of operation showed now like strings of hard nuts.—J. A. VIEREGGE, M.D., of St. Paul, in *Northwestern Lancet*.

BOOK REVIEWS.

Klinisch-Experimentelle Studien über Chirurgische Infektionskrankheiten. Von Dr. JULIUS FESSLER, I Assistent der Kgl. Chirurgischen Universitäts-Klinik München unter weil. Prof. von Nussbaum, etc.

Clinical and Experimental Studies of Surgical Infectious Diseases. By Dr. JULIUS FESSLER, First Assistant in the Surgical Clinic of the University of Munich under Prof. von Nussbaum, etc.

The author of this work details numerous bacteriological experiments and clinical observations relating to the influence of ichthyol upon cultures of the specific streptococcus of erysipelas, of the micro-organisms of suppuration, and a comparative study of its effects upon erysipelas and suppuration in man. He found both the ammonium and sodium ichthyol, even in weak solutions, very destructive to the erysipelas germ, but capable of exerting a much less decided influence upon the growth of the staphylococcus aureus. In comparing his studies in the laboratory and at the bedside, he concludes that ichthyol, employed early and energetically, will cure erysipelas within a few days by destroying its germs. In numerous cases of mixed infection, also, the author employed ichthyol, both internally and externally, with advantage.

Amygdalotomie et Hémorrhagie. Par le Docteur E. J. MOURE, Paris, 1891. Octave Doin.

Tonsillotomy and Hæmorrhagie. By Dr. E. J. MOURE.

In this brochure the author, after speaking of the papers of Lefferts and Ricardeau upon the subject, remarks that troublesome or dangerous bleeding is very much rarer after excision of the tonsils in children than in adults. Dr. Noquet, however, reported a case occurring in a child of 7 years, and the writer gives the history of one occurring in his own practice. The child, 7 years of age, slept after the operation, and on waking vomited a considerable quantity of blood which had been imperceptibly trickling down the œsophagus during sleep. Eight or nine days later several attacks of secondary hæmorrhage occurred.

Bleeding after tonsillotomy does not, perhaps, occur oftener in children than once in 1000 cases. Of 53 cases cited by Ricardeau, in only 2 did secondary hæmorrhage occur, and both patients were adults. In conclusion, Dr. Moure advocates ignipuncture, or operation by the galvanocautery, as being efficacious and unattended by danger.

COMMERCIAL NEWS.

CHLORALAMID.

Dr. Umpfenbach, in the Provincial Lunatic Asylum, under the direction of Dr. Noetel:—

"Chloralamid was given in 55 cases, 23 of which were men and the remainder women. It is interesting to learn that in the greater number of cases the results were everything that could be desired, although the symptoms in some of the cases were very severe. Considerable importance must be attached to the observation that the remedy was well borne in every instance, even when taken for months together; valuable evidence of this was offered by the body-weight, which never decreased during the treatment. Further, no action on the heart or on the vascular or urogenital systems could be detected, nor did symptoms of collapse manifest themselves. In a single case chloralamid was observed to be excitant in action, but this only serves to emphasize its advantage over chloral hydrate, which has such an action much more frequently. The author concludes that chloralamid must be regarded as a decidedly useful hypnotic."

HAVING had experience with Peacock's Bromides, I can say that for a quieter in spinal difficulties accompanied with brain troubles it has, in my experience, become indispensable. It affords sure results, with less secondary trouble than any remedy that I have ever used.

Toledo, Ohio. F. A. KITCHEN, M.D.

YOU can never be disappointed with a chemically-pure preparation of the Hypophosphites of Lime and Soda. McArthur's Syrup is guaranteed to be pure. See their advertisement on page 2 and send for a pamphlet and a sample.

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Aletris Cordial (Rio), . . . 4 oz.

Dose, 2 teaspoonfuls half an hour before meals.

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Mr. Fellows takes this opportunity to thank the profession for their increased recognition of his invention.

To the medical gentlemen who have kindly permitted the publication of their testimony in favor of his hypophosphites, and who, by letter or otherwise, have expressed their disapproval of the fraudulent imitations, he is especially grateful.

With its increasing favor there has been a corresponding increase of imitations, and though this is a compliment in the sense that "only the best things are worth counterfeiting," yet Mr. Fellows would respectfully request the profession to guard against the misleading advertisements and fictitious compounds of notorious imitators.

Safeguards Against Substitution.—Fellows' Hypophosphites is dispensed in bottles containing 15 ounces by measure,—the address, Fellows & Co., St. John, N. B., blown on,—the name, J. I. Fellows, St. John, N. B., in watermark upon the yellow wrapper; it is hermetically corked, and sealed with crimson capping; is heavy, slightly alkaline, has a pleasantly bitter taste, and deposits a flocculent, brown precipitate of hypophosphite of manganese when left undisturbed for forty-eight hours.

NOTE.—Though this precipitate mars the appearance, its presence has been found imperative to its full remedial effect.

BROMIDIA is used more to-day than ever. It is reliable and never fails in its action.—*Canada Lancet*, January, 1891.

THE ATMOSPHERIC TRACTOR.

The phenomenal success enjoyed by the Atmospheric Tractor Company is entirely deserved. Their advertisement on third page of cover will prove of interest to all obstetricians.